

Before The
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In re

**DISTRIBUTION OF CABLE
ROYALTY FUNDS**

**CONSOLIDATED PROCEEDING
NO. 14-CRB-0010-CD (2010-13)**

**ALLOCATION PHASE REBUTTAL CASE OF
THE COMMERCIAL TELEVISION CLAIMANTS**

The Commercial Television Claimants Group (“CTV”) hereby submits its rebuttal case evidence in the Allocation Phase of the 2010-2013 Cable Copyright Royalty Distribution Proceeding.

CTV’s rebuttal case evidence consists of the testimony of the following witnesses, along with associated exhibits:

- **Dr. Gregory Crawford**, Professor of Economics and Director of Graduate Studies, University of Zurich Department of Economics.
 - Dr. Crawford will present testimony rebutting the written direct testimony of Program Suppliers witnesses Gray, Hamilton, and Pasquale, and demonstrate that data regarding subscriber viewing of distant signal programming is neither a useful nor an appropriate measure for determining the relative value of that programming.
 - Dr. Crawford will also present testimony rebutting the written direct testimony of SDC witness Erdem, and demonstrate that regression analyses are a useful and appropriate means of determining the relative value of distant signal programming, and that Dr. Erdem’s criticisms and proposed alternative analyses are erroneous.

- **Dr. Christopher Bennett**, Principal, Bates White Economic Consulting.
 - Dr. Bennett will present testimony rebutting the written direct testimony of Program Suppliers witness Gray, and demonstrate, among other things, that Dr. Gray's multiple errors in sampling, program categorization, and weighting, and his replacement of actual measures of distant viewing with projections based on a flawed and unreliable regression methodology, produce results that are unreliable, imprecise, and demonstrably biased. The multiple overlapping errors mean that Dr. Gray's study is not a usable or reliable measure of distant signal viewing in 2010-2013.
 - Dr. Bennett will also present testimony rebutting the written direct testimony of Program Supplier witness Horowitz, and demonstrate that several of the WGN programs Mr. Horowitz identified in his survey questionnaires as examples of categories of programming attributable to Program Suppliers were actually programs attributable to the Commercial Television category.
 - Dr. Bennett will also present several charts regarding patterns of distant signal carriage and viewing by market size that will be referred to in the rebuttal testimony of CTV witness Ceril Shagrin.
- **Ms. Ceril Shagrin**, independent consultant on audience measurement.
 - Ms. Shagrin is a former senior executive at Univision and at Nielsen Media Research and a leading member of industry organizations focused on audience measurement, including the Media Rating Council, the Committee on Local Television Measurement, and the Council for Research Excellence. She will present testimony rebutting the written direct testimony of Program Suppliers witnesses Gray and Lindstrom, and demonstrate that because of the design of the National People Meter Sample from which Dr. Gray draws his viewing data, and his failure properly to weight the data obtained from those households, his study does not provide a valid or reliable measure of the actual viewing to distant signal programming that occurred in 2010-2013. Ms. Shagrin will also contrast the viewing data reported by Dr. Gray with the Nielsen

ratings data that are widely used as the basis for advertising sales in the television industry.

In addition to the testimony of these three witnesses, CTV hereby designates as evidence in this proceeding the Testimony of Jerald N. Fritz and associated exhibits in the 2004-2005 Phase I Cable Distribution Proceeding, Docket No. 2007-3 CRB CD 2004-2005 (filed June 1, 2009 and corrected on October 1, 2009, and admitted as Settling Parties Exhibits 19, 20, 21, 22, and 23), as well as his complete Oral Testimony in that proceeding, Hearing Transcript pp. 959-1001 (October 13, 2009).

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of September, 2017, a copy of Allocation Phase Rebuttal Case of the Commercial Television Claimants was served on all case participants via the Copyright Royalty Board's eCRB system, and via e-mail to the parties on the attached service list.

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Before the
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WASHINGTON, D.C.

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In the Matter of)	
)	
Distribution of Cable Royalty Funds)	CONSOLIDATED PROCEEDING
_____)	No. 14-CRB-0010-CD (2010-13)

REBUTTAL TESTIMONY OF GREGORY S. CRAWFORD, PHD

September 15, 2017

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Figure 1: Average affiliate fees much higher for sports content despite similar levels of average 24-hour viewership11

I. Introduction

I.A. Summary of qualifications and experience

- (1) I am Gregory S. Crawford, Professor of Applied Microeconomics at the University of Zurich in Switzerland. My educational background, experience, and credentials have been presented as part of my Written Direct Testimony submitted in this proceeding on December 22, 2016.
- (2) I have testified three times previously before the Copyright Royalty Board (CRB), first as a rebuttal witness for the Commercial Television Claimants in the 2004-2005 Cable Royalty Distribution Proceeding and later as a direct and rebuttal witness for Music Choice in two separate proceedings regarding the determination of reasonable royalties for the use of sound recording performance rights on “pre-existing subscription services” (PSS), one covering the royalties paid between 2013 and 2017 and the second covering the royalties paid between 2018 and 2022.¹

I.B. Executive Summary

I.B.1. Scope of Charge

- (3) In this rebuttal report, I have been asked by counsel for the Commercial Television Claimants to undertake two tasks related to determining the appropriate division of cable copyright royalties paid by cable systems for retransmission of distant signals during 2010-2013. The first is to evaluate the premise underlying the direct testimony of a number of witnesses presented on behalf of the Program Supplier claimants that viewing behavior is an appropriate measure of value. These witnesses include Dr. Jeffrey S. Gray, Ms. Sue Ann R. Hamilton, and Mr. Jan Pasquale.
- (4) The second task I was asked to undertake is to evaluate the arguments of Dr. Erkan Erdem, a witness presented on behalf of the Devotional Claimants, about the usefulness of “Waldfoegel-type” regression analyses in measuring the relative value of programming represented by the various claimant groups.

¹ See In the Matter of Determination of and Terms for Preexisting Subscription and Satellite Digital Audio Radio Services, Docket No. 2011-1 CRB PSS/Satellite II. And In the Matter of Determination of Royalty Rates and Terms for Transmission of Sound Recordings by Satellite Radio and “Preexisting” Subscription Services (SDARS III), Docket No. 16-CRB-0001 SR/PSSR (2018-2022).

I.B.2. Summary of Opinion

- (5) Based on my experience and expertise, and on my review and analysis of the written testimony of the witnesses identified above, it is my opinion that (a) viewing is not a useful or appropriate measure for determining the relative value of programming on distant signals retransmitted by cable operators, and (b) Dr. Erdem's criticisms of regression approaches as a measure of such relative value are erroneous and should not be credited. I provide support for these conclusions in the remainder of this testimony.

II. Viewing is not an appropriate basis for determining the relative value of alternative programming types carried on distant broadcast signals

- (6) Three Program Supplier witnesses provided direct testimony advocating for the use of relative amounts of viewing by consumers of distant signal programming as the preferred measure of the relative value of that programming in this proceeding.
- (7) In Section II.A, I summarize Dr. Gray's arguments in favor of viewing-as-value. In Section II.B, I explain why this approach is faulty. Importantly, Dr. Gray uses the wrong framework: the right framework seeks to measure cable operators' relative market value for different types of programming. Using consumer viewing choices, as Dr. Gray does, is wrong because relative amounts of consumer viewing don't measure relative consumer value and, even if they could, relative consumer value isn't equivalent to relative cable operator value. In short, viewing isn't value, particularly in the context of cable distant signal carriage.
- (8) In Section II.C, I consider the evidence in support of viewing-as-value put forward by Dr. Gray, Ms. Hamilton, and Mr. Pasquale. I explain that while consumer viewing might conceivably be seen as an *input* into consumer value, it doesn't *equal* consumer value (much less cable operator value) and that even a fundamentally transformed hypothetical market for the rights at issue in this proceeding would not be driven by distant-signal advertising revenue (as suggested by Ms. Hamilton and Mr. Pasquale).
- (9) In Section II.D, I rebut claims by Dr. Gray that viewing data are the only data available to evaluate relative marketplace value, and describe how data regarding the royalties actually paid by CSOs for the carriage of existing distant broadcast signals and/or survey responses from CSOs regarding the relative value of different types of programming carried on distant signals, used by many other experts in this and previous proceedings, are the correct data from which to do so.

II.A. A summary of Dr. Gray's arguments for the use of relative viewing as a measure of relative marketplace value

- (10) In his written direct testimony, Dr. Gray presents estimates of the relative value of the alternative programming types carried on distant broadcast signals based on estimates of the relative share of viewing of each programming type by cable subscribers.² The Program Suppliers claimant group

² Written Direct Testimony of Jeffrey S. Gray, Ph.D. In re Distribution of Cable Royalty Funds, No. 14-CRB-0010-CD (2010-13) (filed December 22, 2016, amended March 9, 2017, corrected April 3, 2017) (hereinafter "Gray WDT"), ¶¶38-39 and Table 2.

uses Dr. Gray's estimates as the basis for their proposal regarding the share of the total compulsory license pool that should go to Program Suppliers.³

- (11) In this subsection, I focus on the errors of economic logic underlying Dr. Gray's approach. Beyond those errors, I understand that another CTV rebuttal witness, Dr. Chris Bennett, will demonstrate flaws in Dr. Gray's source data, sampling design, and statistical analysis used to impute distant viewing that would invalidate his approach even if it stood on solid economic foundations.
- (12) The core of Dr. Gray's economic logic is presented in paragraph 13 of his written direct testimony. Here he says:
- (Gray1) "It is axiomatic that consumers subscribe to a CSO to watch the programming made available via their subscriptions."
 - (Gray2) "The more programming a subscriber watches, the happier the subscriber is, and the more likely she will continue to subscribe, all else equal."
 - (Gray3) "Therefore, a measure of the happiness, or 'utility,' an individual subscriber gets from a specific program is the number of minutes that subscriber spent viewing the program offered to him or her by the [Cable System Operator (CSO)]. A measure of the utility all subscribers get, in total, from a specific program is the total level of subscriber viewing of the program."
 - (Gray4) "Thus, even though CSOs are the buyers of the programming bundles, a reasonable measure of the relative market value of a retransmitted program is the relative level of subscriber viewing of that program."
- (13) Based on this framework, Dr. Gray then estimates the relative viewing of the programming offered by each of the claimant groups carried on a sample of distant broadcast signals.⁴ He concludes, "[M]y analysis indicate[s] that relative program viewership provides a reasonable and reliable measure of the relative economic value of distantly retransmitted programing... and determine what I believe to be reasonable and reliable relative market values of the 2010-2013 claimant categories."⁵

³ Compare Gray WDT, Table 2 and Errata to Amended and Corrected Written Direct Statement Regarding Allocation Methodologies of Program Suppliers, *In re Distribution of Cable Royalty Funds*, No. 14-CRB-0010-CD (2010-13) (filed December 22, 2016, amended March 9, 2017, corrected April 3, 2017) (hereinafter "Program Supplier's WDS"), p. 2.

⁴ Gray WDT, ¶¶30-39 and Table 2.

⁵ Gray WDT, ¶40.

II.B. Dr. Gray's use of relative viewing to value programming is simply wrong, as it doesn't reflect the economic environment in which cable systems make decisions about distant signal carriage

II.B.1. Distant Broadcast Signal Economics Redux

- (14) In Section II of my direct testimony, I described the economic incentives governing the decisions of cable system operators (CSOs) to carry distant broadcast signals on their systems.⁶ Those incentives are instrumental for understanding why Dr. Gray's approach of determining relative marketplace value as the relative viewing of alternative programming categories is simply wrong.
- (15) In my direct testimony, I explained three fundamental characteristics of the cable distant signal market. First, CSOs earn the vast majority of their video revenue from the sales of monthly subscriptions to households, which enable those households to watch any of the programming carried on a bundle of cable networks.⁷ These bundles include local broadcast signals (channels), distant broadcast signals, and so-called "cable networks." CSOs earn only a relatively small amount of revenue from the sale of advertising on cable networks.⁸
- (16) Second, if a CSO cannot earn revenue from advertising on a channel that it carries, then it will choose to carry that channel primarily in order to attract and/or retain subscribers.⁹ Since this is the case for distant broadcast signals, the primary incentive CSOs can have to carry them is to attract new subscribers or retain their existing subscribers.¹⁰
- (17) Third, when deciding which channels to carry in order to attract and retain subscribers, two factors are likely to be paramount to CSOs:
- The first is the difference between households' average willingness-to-pay (WTP, a.k.a. "average consumer value") for a channel and its cost to CSOs.¹¹ Because the cost for any two distant signals that have the same DSE is the same, when facing a

⁶ See Written Direct Testimony of Greg Crawford, Ph.D. In the Matter of Distribution of Cable Royalty Funds. No. 14-CRB-0010-CD (2010-13) (filed Dec. 22, 2016, corrected April 11, 2017) (hereinafter "Crawford WDT"), Section II, ¶¶ 17-43.

⁷ SNL Kagan reports that between 2010 and 2013, CSOs earned between 93.5% and 94.3% of their video revenue from subscriptions, with the remainder coming from advertising. *Source*: SNL Kagan, Industry aggregates for CSO revenue breakouts, Raw data sourced via SNL by request, provided 9/6/2017.

⁸ *See Id.*

⁹ Crawford WDT, ¶21.

¹⁰ Crawford WDT, ¶¶37-38.

¹¹ Crawford WDT, ¶¶22-24.

choice between two such signals, systems will carry the one that has the highest average value to subscribers and potential subscribers.¹²

- The second is the extent of negative correlation in consumer WTP for a distant signal relative to the other channels the CSO has in its bundle.¹³ In my research, I have previously found that programming that serves niche or special-interest tastes (including news, sports, and weather content) is more likely to generate willingness-to-pay that is negatively correlated with tastes for programming already carried in cable system bundles. The results of my econometric estimation in this case, finding higher values-per-minute for the Sports, Commercial Television, and Canadian claimants, support these conclusions.¹⁴

- (18) The value to cable operators highlighted in these two factors reinforces a general principle in economics: cable operators are likely to value programming that is *differentiated* from the other programming they include in their cable bundles.¹⁵ Much like a good fixed-price buffet has many possible things to eat, differentiated programming is more likely to match the varying interests of subscribers and potential subscribers than undifferentiated programming and, if consumers value programming about their own interests, cable operators will also value them.¹⁶ This is particularly true of *exclusive* programming that is highly valued by consumers as, by definition, no other channel can offer it.
- (19) These economic principles can therefore inform how CSOs are likely to value the programming categories carried on distant broadcast signals based on an analysis of how likely such programming is to be differentiated from other programming offered on CSOs' cable bundles. For example, live sports programming is both highly differentiated and is often of high interest to consumers, and thus likely to be highly valued by cable operators.¹⁷ By contrast, nationally distributed public and

¹² Crawford WDT, ¶¶38-39.

¹³ Crawford WDT, ¶¶25-34.

¹⁴ Crawford WDT, ¶¶42-43. This effect is further supported by the long-standing theoretical literature in media economics analyzing the different types of programming selected under advertising versus pay support. For example, Chae & Flores (1998) show that broadcast stations, or "broadcasters," are more likely to select programming that generates an "extensive" market, i.e. one in which audience sizes are large but viewers' willingness-to-pay for programming are relatively low, whereas pay-tv providers, or "narrowcasters," are more likely to select programming that generates an "intensive" (what I would call "niche") market, i.e. one in which audience sizes are small but viewers' willingness to pay for programming are relatively high. See Chae, S. and Flores, D. Broadcasting versus narrowcasting. *Information Economics and Policy*, 1998, Vol 10, Issue 1, 41-57.

¹⁵ See, for example, Besanko, D., Dranove, D., Shanley, M., and Schaefer, S. *Economics of Strategy*, third edition. John Wiley & Sons, Inc., 2004. Pp. 214-216.

¹⁶ Furthermore, because potential subscribers don't already subscribe, differentiated programming that is valuable to potential subscribers is likely to be negatively correlated with those potential subscribers' tastes for the existing components of cable bundles.

¹⁷ Similarly, live station-produced newscasts from a different, often larger, television market are differentiated from newscasts on local market stations to the extent they cover different cities or states and sports teams that may be of regional significance in the distant cable community. Written Direct Testimony of Marci Burdick, *In the Matter of*

devotional programming, while differentiated from other programming *in general*, may already be provided on existing local broadcast signals carried by CSOs; if so, they are unlikely to be differentiated and are likely to be of lower relative value. This is also likely for the general entertainment content represented by the Program Suppliers; such programming is also likely to be available on existing local broadcast signals. As such, it is also likely to be of lower relative value to CSOs.

- (20) In summary, both economic logic and academic research based on market data show that CSOs find that programming appealing to narrow tastes, programming differentiated from what is already available on cable bundles, and programming not available on other channels included in cable operators' existing bundles, is likely to be of value in attracting and retaining subscribers, regardless of how extensively it may be viewed.

II.B.2. Dr. Gray's transition from a cable-operator-value framework to a consumer-viewing framework is fatally flawed

- (21) Comparing Dr. Gray's analysis to the incentives facing cable operators when making distant signal decisions summarized above reveals the flaws in his approach. In his description of how one should determine relative marketplace value in this proceeding, Dr. Gray correctly focuses on cable system operators (CSOs).¹⁸ He furthermore articulates, again correctly, that "CSOs base their channel and carriage bundling decisions on attracting and retaining subscribers."¹⁹
- (22) Dr. Gray then claims, mistakenly, that "sufficient data are unavailable to properly model CSOs' buying decisions."²⁰ As is evident in my own direct testimony, the direct testimony of Dr. Mark Israel and Mr. James Trautman on behalf of the Joint Sports Claimants, and testimony by Drs. Joel Waldfogel and Gregory Rosston in previous proceedings²¹, there indeed *is* data available to model CSOs' buying decisions, in the form of both royalty payments made by CSOs for the carriage of existing distant broadcast signals and survey responses from cable system operators regarding the types of content they value when making their distant signal carriage decisions (e.g. the current and

Distribution of Cable Royalty Funds, No. 14-CRB-0010-CD (2010-13)(filed Dec. 22, 2016), ¶¶5, 7, 17., and Written Direct Testimony of Jerald N. Fritz, *In the Matter of Distribution of the 2004 and 2005 Cable Royalty Funds*, Docket No. 2007-3 CRB CD 2004-2005 (filed Jun. 1, 2009), pp. 2-5.

¹⁸ Gray WDT, ¶11.

¹⁹ While Dr. Gray doesn't explicitly say so, CSOs cannot benefit in any way from advertising carried on distant broadcast signals (Crawford WDT, ¶¶21, 37-38). I discuss why CSOs carrying distant signals would also not expect any advertising revenue even in a fundamentally transformed hypothetical market in Section II.C.2 below.

²⁰ Gray WDT, ¶12.

²¹ See Written Direct Testimony of Dr. Mark A. Israel, *In re Distribution of Cable Royalty Funds*, No. 14-CRB-0010-CD (filed Dec. 22, 2016) (hereinafter "Israel WDT"), Written Direct Testimony of James M. Trautman, *In re Distribution of Cable Royalty Funds*, No. 14-CRB-0010-CD (filed Dec. 22, 2016) (hereinafter "Trautman WDT"), Written Direct Statement of Gregory Rosston, *In the Matter of Distribution of 1998 and 1999 Cable Royalty Funds*, No. 2001-8 CARP CD 98-99, (Feb. 14, 2003), and Written Direct Statement of Joel Waldfogel, *In the Matter of Distribution of the 2004 and 2005 Cable Royalty Funds*, No. 2007-3 CRB CD 2004-2005 (Jun. 1, 2009) (hereinafter "Waldfogel WDT").

previous Bortz surveys). In Section II.D below, I discuss this error in greater detail, and explain why using such CSO-focused data is a valid and preferable approach for inferring the relative market values of the programming carried on distant broadcast signals.

- (23) Dr. Gray then makes a second error, which leads to his erroneous conclusion. He articulates the views summarized in Paragraph (12) above, starting from the premise that consumers value a subscription to a bundle of programming in order to view that programming, but arriving at a conclusion that “a reasonable measure of the relative market value of a retransmitted program is the relative level of subscriber viewing of that program.”²²
- (24) In making this leap, Dr. Gray does not provide any evidence that cable system operators *actually* rely on viewership information when making decisions about which distant broadcast signals to carry.²³ Nor does he provide any justification on economic grounds for why such information *would* be relied upon by cable operators when selecting distant broadcast signals. Instead, his support for using viewing to infer value for distant broadcast signals is only a set of economically irrelevant references to viewing data being used “when making licensing deals with broadcast stations and cable networks outside the compulsory licensing scheme” (*i.e.*, in ad-supported markets).²⁴ Furthermore, Dr. Gray flatly misquotes his only directly cited evidence, Mr. Paen’s 2004-2005 testimony, which discussed ad-supported channels’ programming decisions, by substituting “CSO” where Mr. Paen referred to television broadcast stations or basic cable networks, without any support or justification.²⁵
- (25) Dr. Gray’s conclusion is simply a non sequitur. Broadcast stations and cable networks both rely on viewership information *because a significant portion of their revenue comes from advertising* and advertising revenues depend on viewership. Broadcast stations are thus naturally interested in how many households will watch any programming they choose to air.²⁶ Similarly, approximately 43% of US revenues to basic cable networks come from advertising sales, so it is natural that they too wish to understand households’ viewing behavior.²⁷ But cable system operators choosing to carry particular

²² Gray WDT, ¶13.

²³ Nor do any other Program Supplier experts.

²⁴ See, e.g., Gray WDT, ¶14 (citing testimony from 2009 of Alex Paen, a syndicator of first-run programming to broadcast stations and ad-supported cable networks), ¶19 (without supporting citations).

²⁵ Compare Gray WDT, ¶14, with Paen Testimony at p. 12, cited by Dr. Gray. The additional portions of Mr. Paen’s testimony cited by Dr. Gray, pages 5-6 and 9-10, also have nothing whatsoever to do with CSO programming choices and do not support Dr. Gray’s assertions. See Gray WDT, ¶14 & n.15., and Program Supplier’s WDS, Vol. II, Prior Designated Testimony, at Tab A, Docket No. 2007-3 CRB CD 2004-2005, Written Direct Testimony of Alex Paen (hereinafter “Paen Testimony”), pp. 5-12.

²⁶ Mr. Paen, cited by Dr. Gray, makes this point clear in his testimony regarding his experience selling syndicated programming to broadcast stations. He says, “Suppliers of [syndicated] programming and [broadcast] stations negotiated license fees based on estimated advertising revenue” and “[Syndicated] program revenues are determined by the appeal of a program based on the number of viewers watching. Ultimately, a producer is compensated for program creation and investment out of the sale of advertising time which, in turn, depends on the public’s election to watch a program.” See Paen Testimony, pp. 5-12.

²⁷ Gregory S. Crawford, “The Economics of Television and Online Video Markets,” Chapter 7 in *Handbook of Media Economics*, Vol. 1 (North-Holland, 2015), Table 7.2, pp. 281-282.

distant broadcast signals *cannot* benefit from any advertising on those distant signals; they can only benefit from their carriage to the extent they attract and retain subscribers, not from how much those subscribers actually watch the programming.²⁸

- (26) As such, Dr. Gray's analysis is simply incorrect: it analyzes marketplace dynamics that just aren't germane to cable system operators' profitability and thus cannot reflect CSO, and thus distant signal marketplace, value.

II.B.3. Dr. Gray's reliance on relative viewing omits two factors critical to determining relative marketplace value

- (27) It is instructive to focus on cable operator value and ask whether Dr. Gray's method based on relative viewing by consumers could possibly capture that value. In what follows, I show that it cannot, because consumer viewing isn't the same as cable operator value.
- (28) Again, from an economic perspective, the two factors that influence cable system distant broadcast signal carriage decisions are (1) the average consumer value of having a distant signal included in a bundle and (2) the negative correlation in consumers' value for the distant signal relative to their values for the other channels included in the operator's bundle (i.e., whether the programming is likely to attract or retain subscribers).
- (29) Dr. Gray's approach implicitly assumes that consumer viewing *equals* CSO value. To see the flaws in this implicit assumption, it is useful to break it into two parts corresponding to the two factors that affect cable operator carriage decisions. In a nutshell, *consumer viewing is not consumer value* and, even if it were, *consumer value is not cable operator value*.

II.B.3.a. Consumer viewing is not consumer value

- (30) I consider first the average consumer value for a distant signal.²⁹ Dr. Gray's implicit assumption that consumer viewership incorporates consumer value has a critical flaw because *his viewership measure counts minutes equally across programming types*.³⁰

²⁸ For the same reasons, the arguments made by Ms. Hamilton and Mr. Pasquale citing evidence of cable operators and/or broadcast stations using viewing data to learn about potential advertising revenues are also irrelevant (Written Direct Testimony of Sue Ann R. Hamilton, *In the Matter of Distribution of the 2010, 2011, 2012, and 2013 Cable Royalty Funds*. No. 14-CRB-0010-CD (2010-13) (filed Dec. 22, 2016) (hereinafter "Hamilton Testimony"), p. 14; Written Direct Testimony of Jan Pasquale, *In the Matter of Distribution of the 2010, 2011, 2012, and 2013 Cable Royalty Funds*. No. 14-CRB-0010-CD (2010-13)(filed Dec. 22, 2016) (hereinafter "Pasquale Testimony"), p. 5).

²⁹ As I described in my direct testimony (Crawford WDT, ¶39) and summarized above, distant broadcast signals that have the same DSE cost the same to cable systems, so that when considering the first factor influencing CSO carriage decisions, the average consumer value for a channel relative to its cost, one can focus just on the average consumer value of the signal.

³⁰ Gray WDT, ¶38.

- (31) Dr. Gray's Table 2 underlying his share estimates makes this implicit assumption clear: he simply counts up his estimates of the minutes of distant viewing of each of the claimant category programming types and calculates the share of distant viewing of each type. These form the basis for his recommended claimant shares of the royalty pool. Thus, in his viewing-as-value framework, one minute viewed of Program Supplier claimants' programming necessarily represents the same value as one minute viewed of Joint Sports claimants' programming.
- (32) The assumption, however, is simply wrong: there is overwhelming evidence that consumers value different types of programming differently.³¹
- (33) First, there is the simple fact that cable networks offering different types of programming are able to negotiate very different per-subscriber fees from cable systems. These per-subscriber fees (called affiliate fees) are informative as they represent what cable operators are willing to pay for different content in actual transactions in a separate programming marketplace that is partially subscription-based, a willingness that reflects their belief that they can then charge subscribers the prices necessary to cover these costs
- (34) In my Written Direct Testimony, I noted that cable systems in 2016 paid the Walt Disney Company an estimated average of \$7.21 per subscriber per month for the right to carry the sports channel ESPN.³² By contrast, the cable network Animal Planet received an estimated average of only \$0.12 per subscriber per month from cable operators in 2016.³³ While some of this difference no doubt reflects differences in bargaining power held or advertising revenue earned by the two cable networks, it also reflects that the different content carried on these channels is simply valued differently by consumers.
- (35) The differences in what cable systems are willing to pay for content is particularly pronounced for sports programming relative to other types of programming. Figure 1 below, adapted from some of my recent academic work in progress, reports the average affiliate fee paid for different cable networks in 2010-2013 against their average viewership, or "ratings," in the same years.³⁴ In the

³¹ In addition to the evidence discussed in the paragraphs that follow, Dr. Alan Rubin, who testified on behalf of Program Suppliers in prior cable royalty distribution proceedings and whose testimony from the 1989 Cable Royalty Distribution Proceeding Program Suppliers incorporate by reference in this proceeding, provided testimony about his academic publications in the subfield of media research known as the "uses and gratifications theory," which seeks to identify the different needs motivating people to view television and the different rewards they experience from such viewing. During cross-examination, Dr. Rubin admitted that his research showed that people who watch television for the purpose of "passing the time" both watch more television and tend to get *less* satisfaction from that viewing. See Program Supplier's WDS, Vol. II, at Tab D, Hearing Transcript of Dr. Alan Rubin *In the Matter of 1989 Cable Copyright Royalty Distribution Proceeding*, Docket No. CRT 91-2-89CD, pp. 5432, 5436-5438.

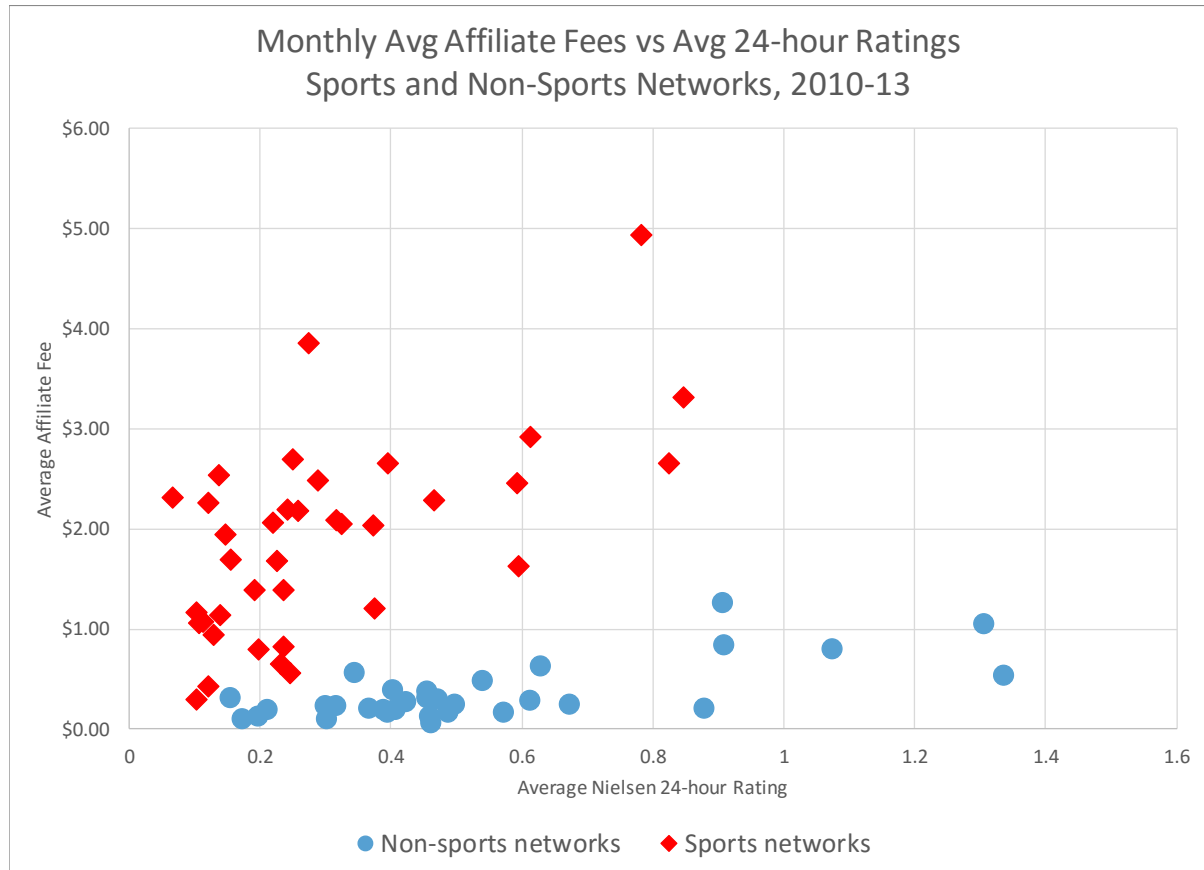
³² Frank Bi, "ESPN Leads All Cable Networks in Affiliate Fees," *Forbes.com*. Jan. 8, 2015, available at <http://www.forbes.com/sites/frankbi/2015/01/08/espn-leads-all-cable-networks-in-affiliate-fees/#4b87b5a4e60c>.

³³ SNL Kagan, TV Network Summary. Accessed August 29, 2017, 18:57. https://www.snl.com/web/client?auth=inherit#industry/tv_NetworksSummary

³⁴ See Figure 3 in Gregory S. Crawford, Robin S. Lee, Michael D. Winston, and Ali Yurukuglu, "The Welfare Effects of Vertical Integration in Multichannel Television Markets" (NBER Working Paper No. 21832, 2015) (CTV0001747-

figure, networks with sports content are indicated by red diamonds; those with non-sports content are indicated by blue dots.³⁵

Figure 1: Average affiliate fees much higher for sports content despite similar levels of average 24-hour viewership



- (36) The difference in the amount of money paid by cable systems to networks providing sports versus non-sports content *for the same level of viewership* is remarkable. Not only are fees for sports content much higher than fees for non-sports content for the same level of viewership, they are typically a multiplicative factor higher. For example, between 2010 and 2013, the Hallmark Channel received an

CTV0001809). The Nielsen “rating” is the percentage of all US television households who watch a given program on a given network at a given time.

³⁵ Crawford et. al. (2015) analyze the period 2000-2010 and include in their analysis all offered Regional Sports Networks (RSNs), the 36 most highly-watched national cable networks, and two additional national cable networks with sports-related content (ESPN Classic and the Golf Channel). Networks with sports content were defined as all RSNs as well as national cable networks ESPN, ESPN2, ESPN Classic, and the Golf Channel. The remaining networks were defined as having non-sports content. I include the same channels here, but use updated ratings and affiliate fee data from 2010-2013. SNL Kagan, TV Network Summary. Accessed August 29, 2017, 22:30.

https://www.snl.com/web/client?auth=inherit#industry/tv_NetworksSummary

average Nielsen rating of 0.46 and earned an average affiliate fee from CSOs of 6.4 cents per subscriber per month, whereas the Regional Sports Network Comcast SportsNet Chicago received an average Nielsen rating of 0.40 but earned an average affiliate fee from CSOs of \$2.65 per subscriber per month, over forty times as much.³⁶

- (37) It was for this reason that my co-authors and I specified a model of consumer demand in our academic research to specifically allow for sports content to have a different value per minute of programming than non-sports content.³⁷ When we estimated this model on marketplace data, we found that “consumers derive higher utility from sports channels than non-sports channels if they choose to spend the same amount of time watching each.”³⁸ Contrary to Dr. Gray’s unsupported assertion that “[a] measure of the utility all subscribers get, in total, from a specific program is the total level of subscriber viewing of the program,”³⁹ our research using marketplace data shows instead that in order to accurately measuring cable operator value it is critical to incorporate information about the price cable systems are willing to pay to get access to that programming.
- (38) This same marketplace difference between prices paid for sports versus non-sports content has also been noted by witnesses in this proceeding representing the Joint Sports Claimants. Daniel M. Hartman, former vice-president of programming acquisitions at DirecTV, and Allan Singer, former senior vice-president of programming investments at Comcast, report that the average costs per subscriber for sports programming “far outweigh” costs per subscriber for non-sports programming, with fees for Regional Sports Networks and the leading sports channel ESPN “4 to 5 times more expensive than the next most expensive non-sports services, and 10 times more expensive than some of the most popular, name brand, general entertainment services.”⁴⁰
- (39) Dr. Mark Israel, Senior Managing Director at Compass Lexecon, in his written direct testimony presented on behalf of the Joint Sports Claimants, extends this analysis to look at expenditures on sports programming *per viewing hour* and finds similar patterns. He analyzes the expenditure on sports and non-sports programming by the top-25 cable networks and finds that while sports programming accounted for less than 3% of total household viewing hours, it accounted for more than 22% of their programming budgets. On a per-household-viewing-hour basis, he concludes that

³⁶ According to Wikipedia, the Hallmark Channel “features a mix of television movies and miniseries, original and acquired television series, and lifestyle programs,” whereas Comcast SportsNet Chicago “broadcasts regional coverage of professional sports teams in the Chicago area.” See Wikipedia, “Hallmark Channel,” accessed September 5, 2017, https://en.wikipedia.org/wiki/Hallmark_Channel and Wikipedia, “Comcast SportsNet Chicago,” accessed September 5, 2017, https://en.wikipedia.org/wiki/Comcast_SportsNet_Chicago.

³⁷ See equation (1) and the text surrounding it on pages 12-13 as well as page 25 of Crawford et. al. (2015).

³⁸ Crawford et. al. (2015) at p. 34.

³⁹ Gray WDT, ¶13.

⁴⁰ Written Direct Testimony of Daniel M. Hartman, *In re Distribution of Cable Royalty Funds*, No. 14-CRB-0010-CD (filed Dec. 22, 2016), ¶29. Written Direct Testimony of Allan Singer, *In re Distribution of Cable Royalty Funds*, No. 14-CRB-0010-CD (filed Dec. 22, 2016), ¶26.

sports programming “is worth roughly 10 (9.60) times more than all other programming offered on the top 25 cable networks.”⁴¹

- (40) Second, while these patterns of high expenditure per viewing hour are most common for sports content, they also arise for other kinds of niche but non-sports content. Among the cable networks for which affiliate fee and ratings data were available from SNL Kagan in the 2010-2013 period, the five non-sports networks with the largest ratio of the average affiliate fee received from cable operators to average 24-hour rating were for Al Jazeera America, FM (then known as NuvoTV), MTV Classic, Fox Business Network, and CNBC. All could reasonably be considered “niche” content.⁴²
- (41) Finally, these obvious differences in the value of different types of content are borne out by the separate regression analyses included in my and Dr. Israel’s direct testimonies. On average across 2010-13, after dropping all duplicate network programming on distant broadcast signals, I found that Sports content had the highest value per minute at 96.3 cents/minute. The values per minute of programming for content by the other claimants was (from high to low): CTV at 15.9 cents/minute, Canadian at 11.7 cents/minute, Program Suppliers at 6.9 cents/minute, Public Television at 5.4 cents/minute, and Devotional at 3.2 cents/minute.
- (42) A simple way to articulate a more plausible relationship between consumer viewing and consumer value is that consumer value for a particular programming type is the product of consumer viewing of that programming type times the *average consumer value per viewing minute* of that programming type.⁴³ Dr. Gray, contrary to the marketplace evidence presented above, simply and incorrectly assumes that consumers value viewing minutes of different programming types the same. Doing so means that his methods will tend to undervalue content that has relatively high consumer value per

⁴¹ Israel WDT, ¶47.

⁴² According to Wikipedia, in 2010-13, Al Jazeera America was a news channel owned by Middle Eastern interests, FM (then known as NuvoTV) offered English-language programming “catered to the Latino community,” MTV Classic was a music video channel emphasizing classic rock videos, and Fox Business Network and CNBC were business news networks. See Wikipedia, *Al Jazeera America*, Accessed Sep. 12, 2017, https://en.wikipedia.org/wiki/Al_Jazeera_America, Wikipedia, *FM (TV channel)*, Accessed Sep. 14, 2017, [https://en.wikipedia.org/wiki/FM_\(TV_channel\)](https://en.wikipedia.org/wiki/FM_(TV_channel)), Wikipedia, *NuvoTV*, Accessed Sep. 14, 2017, <https://en.wikipedia.org/wiki/NuvoTV>, Wikipedia, *MTV Classic (U.S. TV network)*, Accessed Sep. 14, 2017, [https://en.wikipedia.org/wiki/MTV_Classic_\(U.S._TV_network\)](https://en.wikipedia.org/wiki/MTV_Classic_(U.S._TV_network)), Wikipedia, *Fox Business Network*, Accessed Sep. 14, 2017, https://en.wikipedia.org/wiki/Fox_Business_Network, and Wikipedia, *CNBC*, Accessed Sep. 14, 2017, <https://en.wikipedia.org/wiki/CNBC>.

These marketplace examples support the general proposition that CSO willingness to pay reflects the relatively higher value of programming that is differentiated from other content within a cable channel bundle. However, the nature of programming content on cable networks, as contrasted with the nature of programming on distant signals, precludes the use of cable network data as a direct benchmark for determining the relative value of distant signal programming types in this proceeding.

⁴³ This simple representation assumes away that a programming type has “option value,” i.e. that it can be valued by consumers even when it isn’t being watched. I do so not to diminish the relevance of such option value (which can be important, for example in the case of information about extreme weather events, and is another reason not to rely on Dr. Gray’s approach), but to focus attention on Dr. Gray’s implicit assumption that the value of a viewed minute of each programming types is necessarily equal to that of all others.

minute (e.g. sports, news, and Canadian content) and will therefore under-estimate the true relative marketplace value of that programming.

- (43) Dr. Gray's approach to measuring the relative marketplace value of programming on distant broadcast signals is akin to going to a fancy restaurant, drinking the same amount of water and wine, and expecting to pay the same price for each. To consumers, volume isn't value any more than viewing is value.

II.B.3.b. Consumer value is not cable operator value

- (44) The second major economic factor reflected in CSOs' selections of which distant broadcast signals to carry is the negative correlation in consumer values for some content on distant signals relative to content already in their cable bundles. Again, *even if* Dr. Gray had correctly measured consumer value by his consumer viewing measure (which he has not), consumer value is not the same as cable operator value. Failing to account for this difference also causes him to mis-estimate the relative marketplace value of alternative types of distant signal programming.
- (45) While research based on marketplace data demonstrates that cable operators have incentives to add niche, or special-interest, programming due to the profit-maximizing opportunities presented by bundling of channels for sale to households,⁴⁴ that research merely confirms views that are widely shared in the industry. As an article in the Washington Post reported, "the cable TV business... in the 1990s created new opportunities for minority programs, local news, and niche educational networks with small but dedicated numbers of fans."⁴⁵ Similarly Leo Hindery, who was head of Tele-Communications, Inc. (TCI) when it was the largest national cable operator, recently stated, "The bundle is the most democratic thing we ever created... [W]e decided we would have content for all people – people of color, people of different orientations, different faith bases, different educational capabilities – we were going to give them all of that. You ate what we served, but what we served was very diverse."⁴⁶
- (46) Of course, the recent rise of online video alternatives to cable and the coming of age of young adults raised on Internet content has concerned cable operators. Nielsen reports that while the average U.S. television household in 2013 received 189.1 television channels, it only watched an average of 17.5 of them, a number slightly *less* than the number watched in 2009, despite a more than one-third increase in the intervening years in the number of offered channels.⁴⁷ In an effort to offer service to

⁴⁴ See, *infra*, at ¶(17).

⁴⁵ Kang, Cecilia, *In cable, it's survival of the fittest as channels drop from the bundle*. The Washington Post, Apr. 7, 2015. https://www.washingtonpost.com/business/economy/in-cable-its-survival-of-the-fittest-as-channels-drop-from-the-bundle/2015/04/07/ebe91abc-ce5d-11e4-8c54-ffb5ba6f2f69_story.html?utm_term=.21e0b20f244e

⁴⁶ Interview, Leo Hindery by David Garrity. "Cable Exec Leo Hindery on the Future of Bundles". Investopedia.com. Oct. 28, 2016. <http://www.investopedia.com/video/play/cable-exec-leo-hindery-future-bundles/>

⁴⁷ In 2009, the average household received 136.4 channels and watched an average of 17.7. $(189.1-136.4)/136.4 = 38.6\%$. See "Advertising & Audiences – State of the Media". Nielsen Holdings. Page 14. May, 2014.

households at lower price points, cable operators have begun to offer “mini-bundles” or “skinny bundles,” but *they continue to offer bundles*.⁴⁸ This is due to the strong positive effect of bundling on cable operator profits.

- (47) Because of these profit effects of bundling, when facing a choice of two distant broadcast signals with the same cost and the same average consumer value, cable operators will have an incentive to choose those distant broadcast signals that offer more niche, or special-interest, programming.
- (48) This cable-operator value for niche programming *on top of* the values that consumers may place on such programming causes cable operator value and consumer value to diverge. A simple way to articulate a possible relationship between them is that cable operator value for a particular programming type is the product of the average consumer value of that programming type times the “*bundling premium*” of that programming type, i.e. the additional value it provides to the cable operator due to the correlation in consumer tastes for that programming with other components of operators’ channel bundles (if any). Even if Dr. Gray could properly infer consumer value from consumer viewing (which he cannot), simply and incorrectly assuming that *cable operators* value different programming types the same way means that he underestimates the value of niche programming and therefore underestimates the true relative marketplace value of programming from these claimant groups. This, in turn, causes him to misestimate the relative marketplace value of programming from all claimant groups.

II.C. The evidence provided by Dr. Gray and other Program Supplier experts in support of viewing-as-value is wrong

- (49) Dr. Gray tries to support his faulty syllogism by citing the prior testimony of Mr. Paen, but does not cite it accurately, as explained above. In addition, Program Suppliers present the testimony of two other witnesses, Ms. Sue Ann Hamilton and Mr. Jan Pasquale. None of the arguments presented by these witnesses can support Dr. Gray’s viewing-as-value approach.

[https://www.nielsen.com/content/dam/nielsen/global/jp/docs/report/2014/Nielsen Advertising and %20Audiences%20Report-FINAL.pdf](https://www.nielsen.com/content/dam/nielsen/global/jp/docs/report/2014/Nielsen_Advertising_and_%20Audiences%20Report-FINAL.pdf)

⁴⁸ See Koblin, John, “Unwrapping the Cable TV Bundle”, *The New York Times*. Oct. 3, 2015. <https://www.nytimes.com/2015/10/05/business/media/unwrapping-the-cable-tv-bundle.html?mcubz=0>. Even online video services seeking to appeal to “cord-cutters” are themselves offering bundles, to the ire of industry observers. See Mossberg, Walt, *Mossberg: Streaming TV is beginning to look a lot like cable*. Recode. Jan 11, 2017, 09:00 EST. <https://www.recode.net/2017/1/11/14234164/mossberg-streaming-tv-cable>

II.C.1. While consumer viewing may be an *input* into consumer value, it is not *equal* to consumer value (much less CSO value)

- (50) Dr. Gray, Ms. Hamilton, and Mr. Pasquale all argue that consumers decide to subscribe to a cable bundle (Gray/Hamilton) or HBO, a premium channel (Pasquale), in order to watch programming and that if they don't watch, they are unlikely to keep their subscription.⁴⁹ While this may be correct, at least for some consumers,⁵⁰ the implicit inference that these witnesses seek to convey – that Dr. Gray's measure of consumer viewing is therefore a measure of consumer value (much less CSO value) – is *not* correct.
- (51) At the end of Section II.B.3.a, I described how, ignoring a program type's "option value," a consumer's value for a programming type might be described as the product of their viewing of that programming type *times their value-per-minute* of that programming type. When this simple relationship holds, it would be fair to conclude that if there is *no* viewing at all of a particular type of program in a subscribing household, then there is *no* non-option value to that programming type for the household. But it would be wrong to extend that observation to assert that relative consumer value for a programming type is simply equal to the relative amount of its viewing. And even if consumer viewing *did* equal consumer value, for the reasons discussed in Section II.B.3.b above, it would not equal cable operators' value.
- (52) Mr. Pasquale says, based on HBO's experience, "I would expect CSOs to similarly consider ratings of the content on a distant broadcast station as a metric for determining the station's potential to attract and retain subscribers."⁵¹ But HBO's "viewing studies," which he does not describe, only revealed the "correlation between subscribers *not watching* HBO/MAX and the decision to drop their subscription" (emphasis added).⁵² As described immediately above, while zero viewing may mean zero value, that does *not* mean that more relative viewing equals greater relative value.

⁴⁹ Gray WDT, ¶13; Hamilton WDT, pp. 13-14; Pasquale WDT, p. 4.

⁵⁰ Option value, as noted above, may represent real value to some subscribers.

⁵¹ Pasquale WDT, p. 6.

⁵² Pasquale WDT, p. 3. The different role played by ratings at HBO relative to typical broadcasters is understandable, as reflected in the popular press. In an article titled, "Traditional Ratings Numbers Don't Matter as Much to HBO," an HBO analyst concludes that "HBO finds itself nearly exempt from the pressure of driving ratings ever higher" and that "[w]hile [ratings] are a great way to determine whether interest is up for the same show in a previous year, it doesn't speak to much else as these numbers are obviously incompatible when it comes to the Home Box Office," in part because "[t]he primary function of ratings ... is to prove to advertisers how many eyeballs will be on their latest advertisement, ... [b]ut for HBO's programs advertisers don't exist and therefore do not need to be massaged every 30 days with new ratings numbers." See Klein, Jacob. "Traditional Ratings Numbers Don't Matter as Much to HBO". HBO News. Apr. 3, 2013. Accessed Aug. 2, 2017. <http://hbowatch.com/traditional-ratings-numbers-dont-matter-as-much-to-hbo/>. Another author noted, "Ideally, every [HBO] show will receive a) critical praise, b) a huge audience, and c) a shelf full of statuettes. But in a pinch, just one of those things will suffice... Popular 'buzz,' a uselessly fuzzy concept for channels that make money from ad sales, is important to HBO and Showtime because it generates subscriptions," concluding "premium cable [networks like HBO do] pay attention to ratings - just different ratings, and with different standards of success, than at the broadcast networks." See Thomas, June. "How Much Gold is Game of Thrones Worth?" Slate Magazine. Mar. 29, 2012.

- (53) Mr. Pasquale similarly does not describe the “ratings” data he speculates CSOs would use, nor does he report a single instance in which CSOs do rely on ratings data for distant signal carriage decisions. HBO is a nationally distributed cable network for which Nielsen collects national ratings data. By contrast, viewership of programs on broadcast television stations in their own local markets would not reveal how the same programs might be viewed in the CSO’s *different* market, against a different lineup of competing viewing options. And, as described in the next section, ratings for distant signals are not generally reported by Nielsen in their distant markets.
- (54) No Program Suppliers witness has provided any evidence that CSOs use viewership information to determine what *distant broadcast signals* to carry. Nor have they provided sound economic arguments for why CSOs *would* use viewership information to determine distant signal value. Without such evidence, measures of relative value based on relative viewing should simply be disregarded.

II.C.2. In in a radically transformed “hypothetical” market in which ad sales were permitted on distant signals, CSOs carrying distant broadcast signals would not likely earn any meaningful advertising revenue

- (55) Ms. Hamilton and Mr. Pasquale both advance the unfounded assertion that *even if* CSOs cannot now earn advertising revenue on distant signals, they might somehow be able to do so in a different, hypothetical market.⁵³
- (56) This assertion, however speculative, is also incorrect, for three reasons based on the institutional characteristics of advertising sales. First, the viewing of distant broadcast signals is miniscule as a share of total television viewing.⁵⁴ Even if CSOs were permitted to replace the advertisements aired in the signal’s original market with their own, there would be no appreciable value to such

http://www.slate.com/articles/arts/culturebox/2012/03/game_of_thrones_how_hbo_and_showtime_make_money_despite_low_ratings.html.

⁵³ Hamilton WDT, p. 14-15; Pasquale WDT, p. 5.

⁵⁴ In the 2004-05 proceeding, Dr. Michael Topper, a witness for the Commercial Television Claimants, estimated that viewing of distant broadcast signal programming was 0.66% of the total 2004-05 viewing by households sampled in the MPAA Special Study provided by Program Suppliers witness Dr. Paul Lindstrom. He reached this conclusion by calculating the average daily viewing of distant signal programming from that study and dividing it by the average household viewing of all television programming reported by Nielsen for the 2004-05 television season.

Replicating this analysis on the Nielsen data provided by Dr. Gray in this proceeding yields a similar conclusion. According to the data analyzed by Dr. Gray, between 2010 and 2013, there is an annual average of 430.8 hours of total daily viewing of distant signal programming on the sample of stations he selected across an annual average of 20,875 households in the Nielsen National People Meter sample, for an average daily viewing of distant broadcast programming across these years of 0.021 hours/household. In a widely publicized annual report, Nielsen found that the average daily time spent watching either traditional or time-shifted television among all US persons aged 2 or more in 2013 is 4.96 hours/day (See Nielsen, *A Look Across Media, The Cross-Platform Report*. December 2013. <http://www.agbnielsen.net/Uploads/Ireland/The-Cross-Platform-Report-A-Look-Across-Media-Q3-2013.pdf>, Table 1, column “P2+”) A conservative estimate of the share of total television viewing allocated by households to distant signal programming in the 2010-13 period is therefore $0.021/4.96 = 0.42\%$.

advertisements because there would be insufficient audiences for them. Second, I understand that Nielsen generally does not report ratings for distant broadcast stations, because they typically fall below its minimum reporting standards in most local market ratings reports.⁵⁵ Without such ratings, CSOs could not readily sell advertising in particular programs on distant broadcast stations, even if there were audiences to sell.⁵⁶ Finally, I further understand that, *even if* distant broadcast stations had sufficient audiences for CSOs to sell and Nielsen reported those audiences, advertisers primarily focus their advertising purchases on the (much larger) audiences offered by local broadcasters, and would be less interested in the scattered (and very small) audiences offered by distant broadcast signals.⁵⁷

- (57) For these reasons, I conclude that even if one were to consider a counterfactual world in which CSOs could sell advertising in distant signal programs, there would be no appreciable advertising revenue available for CSOs that sought to do so. Accordingly, *as in the existing market*, the principal benefit to cable system operators from carrying distant broadcast signals would be their ability to attract and retain subscribers. In such a world, using relative viewing data to infer relative marketplace value is simply incorrect.

⁵⁵ In Dr. Bennett's analysis of the calculation of Dr. Gray's viewership shares, he highlights how Dr. Gray imputes viewership data in instances where there was no recorded viewing of distant signal viewing as part of the Nielsen Household Meter Data underlying his analysis. Dr. Bennett's Figure 16 shows that, for the sample of distant broadcast stations selected by Dr. Gray, between 93.1% and 95.3% of that programming had no distant viewing record from Nielsen.

The same patterns hold for the broader population of distant broadcast signals. As part of its analysis of the issues raised in the STELA Reauthorization Act of 2014, the Federal Communications Commission reviewed Nielsen data to examine viewing of distant broadcast signals (*See* FCC Report DA 16-613, *In the Matter of Designated Market Areas: Report to Congress Pursuant to Section 109 of the STELA Reauthorization Act of 2014*, MB Docket No. 15-43, pp. 25-27 (Federal Communications Commission, Washington, D.C. 20554, Released Jun. 3, 2016). In particular, the FCC determined the identity of all broadcast stations whose viewing in the month of November 2015 in a distant DMA exceeded the threshold applied by Nielsen in order to be reported in the distant DMA. This threshold requires that the viewing of the distant signal exceed a 9.5 "cume", short for "cumulative rating," i.e. the distant station must have had viewing by at least 9.5 percent of unique households for a minimum of one quarter-hour during a given Nielsen week (Sunday through Saturday, 7:00 a.m. through 1:00 a.m.). Page 26 of the FCC report identified only 89 distant signals being viewed in a distant market (encompassing 79 distinct distant signals) from the more than one thousand unique distant signals carried in distant markets by CSOs in a typical year.

⁵⁶ CTV Expert Jerald N. Fritz spoke to this issue during the testimony he provided in the 2004-05 proceeding. *See* Hearing Transcript of Jerald N. Fritz, *In the Matter of: Distribution of the 2004 and 2005 Cable Royalty Funds*, Docket No: 2007-3 CRB CD 2004-2005, Volume IV, pp. 979-980, 990-993 (Oct. 13, 2009). That fewer than 10% of carried distant broadcast signals surpassed the reporting minimum threshold for Nielsen further demonstrates the folly of Dr. Gray's approach of using such data to determine relative marketplace value in this proceeding.

⁵⁷ CTV rebuttal expert. Ceril Shagrin concludes, "Typically, advertisers who buy advertising time in the local market would prefer local stations, which offer complete coverage of the market and higher ratings, and advertisers interested in national ad exposure would buy time on national networks or nationally syndicated programs." *See* Rebuttal Testimony of Ceril Shagrin, *In the Matter of Distribution of Cable Royalty Funds, No. 14-CRB-0010-CD* (2010-13) (filed Sep. 15, 2017), ¶15. This effect was potentially magnified with the significant increase in subscriber group reporting in 2010. Beginning then, many more distant signals were carried in a subset of a system's subscriber groups, and not across all of the system's subscriber groups. This incomplete market coverage would further lessen a distant signal's attractiveness to advertisers.

II.D. Dr. Gray uses the wrong data

- (58) My discussion of Dr. Gray and the other Program Supplier experts' testimony to this point has focused on the flaws in their viewing-as-value approach. As mentioned briefly in Section II.B.2 above, however, Dr. Gray also mistakenly claims that "sufficient data are unavailable to properly model CSOs' buying decisions."⁵⁸ He doubles down on this claim later in his testimony when he says, "[G]iven the available data, [relative viewing] is the most direct measure of relative value."⁵⁹
- (59) These conclusions are flatly wrong. As demonstrated in my own direct testimony, Dr. Israel's direct testimony on behalf of the Joint Sports Claimants, the direct testimony of other experts in previous proceedings, and the Bortz survey results presented in this and previous proceedings, there *is* directly relevant data readily available to measure the relative value to cable service operators of the alternative programming types carried on distant broadcast signals.
- (60) Indeed there are two useful sources of such data. The first is the survey data produced by the Bortz Media & Sports Group as described in the written direct testimony of James M. Trautman.⁶⁰ The second is the royalty payment and distant signal carriage data filed by cable operators as required by the Copyright Act and available in digital form from the Cable Data Corporation (CDC), paired with information about the programs carried on each distant signal available from a variety of program lineup providers.⁶¹ Indeed, the primary purpose of my direct testimony is to describe exactly how such data can be used in a regression analysis to reveal the relative marketplace value of the programming carried on distant broadcast signals.
- (61) It is worth noting that if Dr. Gray's method of relying on relative viewership did provide information about the relative value to cable operators of alternative programming types, *then my regression analysis and the cable operator surveys would be expected to reveal these same relative values*. In particular, there is nothing in my regression analysis that requires the estimates to come out as they do, either for the estimated values of programming on a per-minute basis or for the overall shares of the royalty pool that should go to each claimant implied by those estimates. If Dr. Gray's premise were correct and relative viewing did reveal relative value to CSOs, then our estimated shares would agree. Because they do not,⁶² and because Dr. Gray's are based on an economic framework that cannot correctly reveal relative marketplace value, his must be disregarded.

⁵⁸ Gray WDT, ¶12.

⁵⁹ Gray WDT, ¶22.

⁶⁰ Trautman WDT

⁶¹ In my direct written testimony, I relied on program lineup information from FYI Television (Crawford WDT, Section V.C, pp. 23-27). In Dr. Israel's as well as Dr. Gray's direct testimony, both relied on program lineup information from Tribune Media Services / Gracenote (Israel WDT, Appendix B-3; Gray WDT, ¶23).

⁶² Using 2013 as a representative example year, compare Dr. Gray's proposed relative shares for Program Suppliers and Sports, 44.69% and 4.80% respectively, with my regression study shares of 19.74% and 38.56% and the Bortz Survey

II.E. Dr. Gray's Viewing Study is Not Usable

- (62) The goal of this proceeding is to understand the relative marketplace value placed by cable operators on the different types of programming carried on distant broadcast signals. The appropriate economic framework for doing so seeks to quantify the relative value of programming to cable operators in their efforts to attract and retain subscribers.
- (63) Dr. Gray's economic framework based on consumer viewership decisions is simply wrong and is guaranteed to mis-measure relative marketplace value by ignoring that (a) consumers value different types of programming differently and (b) because of the incentives caused by operators' bundling of cable networks, cable operators and consumers value different types of programming differently. For these reasons, Dr. Gray's estimates of relative marketplace value should be disregarded when determining the appropriate relative marketplace value for the content carried on distant broadcast signals.⁶³

shares of 27.3% and 37.7% (Gray WDT, Table 2, p. 20; Crawford WDT, Figure 20, p. 45; Trautman WDT, Table IV-1, p. 42).

⁶³ I understand that other rebuttal witnesses appearing on behalf of the Commercial Television Claimants, Ms. Shagrin and Dr. Bennett, will testify that Dr. Gray's study should be disregarded for the independent reasons that the study's design is such that it cannot validly or reliably measure distant signal viewing, and that errors were made even in the execution of that erroneous design.

III. Rebuttal of Dr. Erdem's testimony

- (64) In this section, I evaluate arguments presented by Dr. Erkan Erdem, an expert presented on behalf of the Devotional Claimants, regarding the usefulness of regression methods used by multiple experts for other claimant groups to evaluate the relative marketplace value of the programming carried on distant broadcast signals. This corresponds to the material in Section VIII in his written direct testimony.⁶⁴

III.A. Summary of Dr. Erdem's testimony

- (65) Dr. Erdem discusses in general terms the regression analyses presented by Dr. Mark Israel for the Joint Sports Claimants, Dr. Lisa George for the Canadian claimants, and by me for the Commercial Television Claimants. These are studies “in which the dependent variable is the royalty fees paid by a system and independent [i.e. explanatory] variables include minutes of programming for each claimant category and other control variables, such as factors that may be correlated with the royalty fees,” and which “attempt to estimate the marginal effect of each minute of programming for claimant categories included in the model on royalty fees paid by the CSO.”⁶⁵ Dr. Erdem claims that the starting point for this type of regression analysis “is the approach that was presented by Dr. Waldfogel in the 2004-2005 proceedings,” causing him to refer to this general approach as “Waldfogel-type regressions” in his testimony.⁶⁶
- (66) Dr. Erdem's discussion of “Waldfogel-type regressions” consists of two parts. First, he presents “two fundamental criticisms” that lead him to conclude that “Waldfogel-type regressions do not measure relative market value.”⁶⁷ I provide more detail about these criticisms and show them to be incorrect in the next subsection.
- (67) Second, he presents what he calls “refinements” of Dr. Israel's “Waldfogel-type” regression “to propose a new set of results to the Judges.”⁶⁸ His claimed purpose is to “(1) demonstrate that Waldfogel-type regression results and implied royalty shares are sensitive to the choice of variables, model specification, and the presence of ‘outliers’ or ‘influential observations,’ and (2) propose

⁶⁴ See Written Direct Testimony of Dr. Erkan Erdem, *In the Matter of Distribution of the 2010-2013 Cable Royalty Funds*, No. 14-CRB-0010-CD (2010-13) (filed Mar. 9, 2017) (hereinafter “Erdem WDT”), pp. 13-18

⁶⁵ Erdem WDT, p. 13. He also mentions the regression analysis by Dr. Jeffrey Gray, an expert presenting testimony on behalf of the Program Supplier claimants, but does not discuss it in detail, noting that it has a different dependent variable and different independent variables than those used by the other three experts. I understand that in separate testimony, Dr. Chris Bennett is describing the flaws in Dr. Gray's regression analysis.

⁶⁶ Erdem WDT, p. 13.

⁶⁷ Erdem WDT, p. 14.

⁶⁸ Erdem WDT, p. 14.

models that better characterize the underlying data generating process.”⁶⁹ He ultimately concludes that “[o]verall, ... Waldfogel-type regressions say little about relative market value.”⁷⁰

- (68) Unfortunately, Dr. Erdem’s econometric analyses fail to consider the underlying economics of the behavior he is seeking to analyze, rendering them and his conclusions faulty and unreliable. In addition, the variables he adds in his “refinements” to Dr. Israel’s regressions change the interpretation of the key parameters in these regressions (those on the number of programming minutes of each of the claimant categories) in fundamental ways that would be expected to cause exactly the types of effects he demonstrates in his results. As such, none of his criticisms of Dr. Israel’s specific regressions results, nor of “Waldfogel-type regressions,” are valid. Regression methods can be useful for inferring the relative marketplace value of alternative programming categories if they are carefully crafted to reflect the underlying economic environment and executed with care.

III.B. Dr. Erdem’s high-level criticisms of “Waldfogel-type regressions” are simply incorrect

III.B.1. Dr. Erdem’s assertion that regression approaches cannot inform the Judges because royalty rates are regulated is wrong

- (69) Dr. Erdem asserts that Waldfogel-type regressions “cannot inform the Judges on what the CSOs would have paid for each claimant category in a free market” because the “royalty fees...are the results of the formula mandated by the statute” and “are not amounts CSOs and content producers [and] media companies negotiate for a specific program or set of programs.”⁷¹
- (70) This is simply wrong. First, as outlined above, the critical element in determining the relative marketplace value of programming on distant broadcast signals is the relative value placed on such programming by cable system operators. What Dr. Erdem calls “Waldfogel-type” regressions *reveal relative CSO value*. They do so because they account for the decisions of the CSOs themselves about whether or not to carry distant broadcast signals and pay the required royalty.⁷²
- (71) “Waldfogel-type regressions” estimate CSO demand or, equivalently, CSO willingness-to-pay, for the programming on distant broadcast signals using econometric methods. Variation in the number of a CSO’s subscribers, the price each pays for the bundle including distant broadcast signals, the number

⁶⁹ Erdem WDT, pp. 14-15.

⁷⁰ Erdem WDT, p. 18.

⁷¹ Erdem WDT, p. 14.

⁷² Indeed, CSO value would continue to measure marketplace value even in a hypothetical market where CSOs needed to negotiate with distant broadcast signals over payments for carriage.

of a CSO's carried broadcast signals (and their DSEs), and the programming types carried on such signals provides the necessary variation in both royalties and programming minutes to trace out the value CSOs place on different types of programming. Section IV in my direct testimony provided more detail about how this process works, and Figure 3 and the surrounding text in that testimony provided an example showing how a cable operator required to pay a fixed price for any of three distant signals can be expected to choose the one that provides the highest-value mix of programming.⁷³

III.B.2. Dr. Erdem incorrectly asserts that Waldfogel-type regressions are “volume-focused”

- (72) Dr. Erdem's second “fundamental criticism,” that Waldfogel-type regressions are a “volume-focused” approach, is also simply incorrect. The full text in his testimony says:⁷⁴

...it would be a significant simplification and mistake to assume that the “value” of a program category is measured in minutes of programming. This volume-focused approach is not a reliable method. For example, CSOs may value a short program (e.g., 30-minutes) more than they value a longer program (e.g., 90-minutes). Or they may value a weekly program more than a daily program. Hence, a determination of relative market value cannot be based on total hours or minutes of programming, even if a robust relationship can be established between minutes of programming and royalties.

- (73) There appear to be two claims in this paragraph, both incorrect. The first is that “Waldfogel-type regressions” use the volume of minutes in order to determine the relative value of each type of programming.⁷⁵ The second is that the fact that different programs within a program type may have different value means one cannot calculate a total value of a programming type.
- (74) First, Waldfogel-type regressions do *not* measure the relative value of a programming type using *only* the number of minutes of that programming type. Indeed, if they did do this, Dr. Erdem would be correct to criticize them, as this same mistake underlies one of the flaws I highlighted above about Dr. Gray's use of viewing data to measure relative marketplace value.
- (75) But so-called “Waldfogel-type regressions” don't only rely on the number of minutes of each programming type. Critically, they also measure the *average value per minute* to CSOs of each programming type. Multiplying the average value per minute by the number of minutes of

⁷³ Crawford WDT, ¶¶47-54.

⁷⁴ Erdem WDT, p. 14.

⁷⁵ Erdem WDT, p. 14.

programming gives the total value of each program type. In essence, Waldfogel-style regressions are *value*-focused, not volume-focused.

- (76) Of course, the average values per minute of each claimant's programming are unknown in practice and therefore need to be estimated. It is for this very purpose that one turns to a Waldfogel-type regression: they use variation in the royalties paid by CSOs for distant broadcast signals consisting of different numbers of programming minutes to infer the average value per minute of each programming type. These estimated average values per minute are the estimated coefficients in such a regression.
- (77) Second, Dr. Erdem's example suggesting that one needs to identify the value of individual programs in order to get an estimate of total value of a programming type is also incorrect. A regression does not need to identify the values of the minutes for each program within a category in order to correctly estimate the total value of the category. Rather, the regression only needs to estimate the *average* value per minute of a programming category. Fortunately, this is exactly what regressions do.
- (78) As a simple example, suppose that Dr. Erdem's 30-minute program in one category is valued at 20 cents/minute (for an overall value of this program of \$6.00) and a 90-minute program in the same category is valued at 5 cents/minute (for an overall value of this program of \$4.50). The total value of the 120 minutes of both programs in this case is \$10.50. In this example, the regression would associate 120 minutes of programming in the category with a total value of \$10.50 and estimate an average value per minute of the programming of $\$10.50/120 = 8.25$ cents/minute. Despite the fact that neither program was valued at exactly 8.25 cents/minute, the regression averages them appropriately and correctly calculates the value of the total 120 minutes at \$10.50.

III.C. Dr. Erdem's alternative regression models fail to consider the underlying economics of the behavior he is seeking to analyze and materially change the interpretation of the key parameters in the model

III.C.1. Overview

- (79) In the last half of his direct report, Dr. Erdem presents what he calls "refinements" of Dr. Israel's Waldfogel-type regression "to propose a new set of results to the Judges."⁷⁶ He considers three such refinements: (a) he includes an (undefined) new variable, the "number of distant broadcast signals," as an additional regressor in Dr. Israel's analysis; (b) he allows some of Dr. Israel's explanatory or control variables to have nonlinear rather than linear effects; and (c) he explores the consequences for

⁷⁶ Erdem WDT, p. 14.

Dr. Israel's as well as his own regressions of accounting for "influential observations," observations "that are, in a precise statistical sense, far from (or different from) all other observations."⁷⁷

- (80) Based on the results of these "refinements," Dr. Erdem concludes that "Dr. Israel's results are extremely sensitive to including the distant subscribers as a variable in the model, even though it is a variable that is relevant and practically important" and that "the addition of distant subscribers and non-linear transformations are corrections to Dr. Israel's model, as these models better represent reality and provide a better statistical fit."⁷⁸
- (81) Unfortunately, not only do Dr. Erdem's econometric analyses do a worse job of "represent[ing] reality," but they show a lack of consideration of the underlying economics of the behavior he is seeking to analyze, rendering them and his conclusions faulty and unreliable.⁷⁹ Furthermore, they introduce variables that materially influence the interpretation of key regression coefficients in ways that themselves predict the effects he finds on Dr. Israel's results.

III.C.2. Dr. Erdem's variable measuring the "number of distant subscribers" does not measure what he thinks it does, has no economic justification, and biases his regression coefficients in expected ways

III.C.2.a. Introduction

- (82) Dr. Erdem's most substantive change to Dr. Israel's regressions, and one that is present in all but one of the additional regression results he presents, is to include a variable he creates called "the number of distant subscribers."
- (83) Dr. Erdem concludes that "[c]onceptually, both the number of subscribers and the number of distant subscribers could be relevant variables for the model" and, based on this, adds a variable he creates called the "number of distant subscribers" to Dr. Israel's model and re-estimates it.⁸⁰ He neglects to mention that *his* "distant subscribers" variable, while based on the CDC variable of the same name, is *not* the same. After including his "distant subscriber" variable, he finds that all the coefficient estimates on programming minutes either cannot be statistically distinguished from zero or become negative, implying zero royalty shares for all program categories. Based on this, he concludes, "Dr.

⁷⁷ Erdem WDT, p. 17.

⁷⁸ Erdem WDT, pp. 16-17.

⁷⁹ Erdem WDT, p. 17.

⁸⁰ Erdem WDT, p. 15. See also Erdem WDT, Exhibit 12, p. 44. The results of Dr. Israel's original model (with only lagged subscribers) are reported in the first column of Dr. Erdem's Exhibit 12 ("Model 0A") and the results of his extension (including lagged subscribers and lagged "distant subscribers") are reported in the third column of his Exhibit 12 ("Model 1A").

Israel's results are extremely sensitive to including distant subscribers as a variable in the model, even though it is a variable that is relevant and practically important.”⁸¹

- (84) In fact, including his “distant subscriber” variable has the econometric effect of *double-counting* distant signal minutes. It is therefore no surprise that it “pulls down” (i.e. makes more negative) Dr. Israel’s estimated value-per-program minute for most of the program categories. His conclusions about the sensitivity of Dr. Israel’s analysis are therefore unfounded.

III.C.2.b. Dr. Erdem’s “distant subscriber” variable confounds system-level subscriber data with subscriber-group-level subscriber data

- (85) Dr. Erdem’s “distant subscriber” variable is based on a variable of the same name calculated by CDC. CDC calculates its distant subscriber variable based on a CSO’s reporting of receipts and distant signal carriage *at the subscriber-group level*. Specifically, for each distant signal carried by a CSO, CDC defines the number of distant subscribers as the proportion (by receipts) of the CSO’s total subscribers that receive the distant signal. Thus, if a distant signal is imported by a CSO across its entire system, then the number of distant subscribers in a subgroup is equal to the system’s total number of subscribers. If instead it is imported to a subset of its subscriber groups, then the number of distant subscribers in a subgroup is the CSO’s total number of subscribers multiplied by the ratio of receipts in the subgroups carrying the distant signal to the system’s total receipts.
- (86) Consider as an example the Suddenlink cable system in Mountain Home, AR. It reported having 8,595 subscribers in the first accounting period of 2010 (denoted 2010-1). CDC assigned 8,595 distant subscribers to the distant signal, WGN-DT, because it was carried as a distant signal to all of the subscribers to Suddenlink’s cable system. By contrast, CDC assigned 7,471 (86.9% of 8,595) distant subscribers to KARK-DT because it was carried as a distant signal to subscriber groups with total receipts representing 86.9% of the system-wide receipts.
- (87) In total, the Suddenlink cable system carried 4 distant signals, two of which (including WGN-DT) were carried system-wide, and two of which (including KARK-DT) were carried to 86.9% (or 7,471) of its 8,595 subscribers. CDC calculates the number of distant subscribers for each distant broadcast signal in each subscriber group within each system. As such, *it is not possible to use CDC’s number of distant subscribers in a system-level regression*, as Dr. Erdem claims to do, without first aggregating this variable to a single number for each cable system. Doing so, however, would change the definition of the variable to a new variable whose interpretation may be fundamentally different from what CDC intended.

⁸¹ Erdem WDT, p. 16.

III.C.2.c. Dr. Erdem’s “distant subscriber” variable adds up CDC “distant subscriber” values within a cable system and therefore does not measure what its name suggests

- (88) Dr. Erdem does not (indeed cannot) use CDC’s reported number of distant subscribers for a system in his regressions. Instead, Dr. Erdem *adds up* CDC’s number of subscriber-group distant subscribers for each CSO within each accounting period, and he uses these sums as his “number of distant subscribers” variable in his regressions.
- (89) For example, Dr. Erdem calculates his “number of distant subscribers” variable for Suddenlink in Mountain Home, AR, in 2010-1 to be 32,132.⁸² Not only is this number not the same as the number of distant subscribers in the Suddenlink system or in any of its subscriber groups, it is 3.72 times the 8,595 subscribers that were reported by Suddenlink in total.
- (90) It is clear that Dr. Erdem’s “number of distant subscribers” does *not* represent “distant subscribers” or even “average distant subscribers.” Rather Dr. Erdem’s newly created variable is the product of a system’s subscribers and the weighted number of distant signals it chose to carry.⁸³ This has important implications for the economic interpretation of his regression analyses, the topic I discuss next.

III.C.2.d. Dr. Erdem’s robustness regressions effectively double-count program minutes and therefore do not offer a legitimate critique of Dr. Israel’s results.

III.C.2.d.i. Dr. Erdem misunderstands the purpose of an econometric analysis in this proceeding

- (91) To understand the consequences of Dr. Erdem’s inclusion of his “distant subscribers” variable requires a brief consideration of the goal of an econometric analysis in this proceeding. In general, econometrics is often used for one of two broad purposes: (a) to predict a particular economic outcome and (b) to understand the effects of particular explanatory variables on a particular outcome. Both are reasonable (but very different) goals. For the goal of prediction, the focus is on finding the explanatory variables that best predict the outcome of interest, without regard (necessarily) to what those variables are or what are their individual effects on the prediction. In other words, if the goal is to predict stock prices and the price of tea in China helps, then so be it: include it in the model (and don’t worry about the economic interpretation of its coefficient).
- (92) That is not the purpose in this proceeding, however. In this proceeding, experts are using econometric analyses to help the Judges determine the relative marketplace value of the distant signal programming that was actually chosen and paid for by CSOs in 2010-2013. The dependent variable

⁸² Recall from Paragraph (87), *infra*, that the Suddenlink system in the example carried four distant broadcast signals, two to all 8,595 of its subscribers and two to what the CDC estimated as 7,471 of its subscribers. $2 \times 8,595 + 2 \times 7,471 = 32,132$.

⁸³ With weights for each distant signal given by the share of receipts (measured as a number between 0 to 1) received by the system in the subgroups to which it is carried.

in these regressions, the royalties cable operators pay for the carriage of the distant signals, are informative of this relationship as they reveal overall market value for distant signals. The key explanatory variables in this relationship, the minutes of programming of the various types carried on distant signals, are informative as the impact they have on royalties reveals the *relative* market value of each programming type. Other explanatory variables are included in the model to control for other possible determinants of cable operator royalties. This helps improve the statistical fit of the regression (to “reduce its noise”), providing more precise estimates of the impact of programming minutes that are the focus of the analysis.

- (93) This difference in goals matters, as the approach an econometrician uses for the selection of explanatory variables and the evaluation of the regression model is very different in the two approaches. In a prediction environment, one metric often used by applied econometricians for evaluating a regression is its (adjusted) “R-squared.” R-squared is a measure of how much of the variation in the dependent variable can be explained by the control or explanatory variables.⁸⁴ This is intuitive: if the goal of an econometric analysis is prediction, the more of the dependent variable’s variation the model can explain, the better it will tend to predict that dependent variable in a new sample of data. What doesn’t matter as much is the impact of particular covariates; it is only the *overall* performance of the regression (in terms of predicting the dependent variable) that matters.⁸⁵
- (94) Evaluating an econometric regression is very different in this proceeding, however. The goal here is to find the econometric model that can best reveal relative marketplace value. Doing so means crafting the econometric model to reflect the institutional and economic features of the environment that is generating the data being used. This is important as it enables the economic interpretation of the coefficients in a regression; indeed it is the coefficients on the key explanatory variables (the minutes of the various programming types) that feed directly into the econometrician’s measure of relative marketplace value. The econometrician determines which explanatory variables to include not based exclusively on statistical criteria regarding the overall fit of the model, but also on whether there are good economic and/or institutional justifications for including that variable. He or she also

⁸⁴ “Adjusted R-squared” adjusts this overall measure of fit to account for the number of variables the econometrician includes. This is necessary as if an econometrician has 1,000 data points and includes 1,000 covariates, the model will perfectly fit the data even if the particular covariates are meaningless. Adjusted R-squared adjusts the R-squared measure for the number of covariates, reducing it the more covariates that are added. Thus while including an additional explanatory variable will *always* increase R-squared, including one will only increase the Adjusted R-squared if the additional explanatory variable causes a statistically significant increase in the fit of the model. Econometricians have found that when the goal of the econometric analysis is prediction, using adjusted R-squared to determine whether adding additional variables improves the model’s fit yields better predictions than using unadjusted R-squared as the deciding factor.

⁸⁵ Hal Varian describes a more advanced method commonly used to improve the predictive performance of statistical models estimated on big datasets called “k-fold cross validation.” See Varian, Hal R. “Big Data: New Tricks for Econometrics”. *Journal of Economic Perspectives* – Vol. 28, No. 2, Spring 2014, pp. 7. As described there, the focus of the procedure is the ability of the model to predict the dependent variable not only within a given sample, but also on samples *other than* that used in estimation (i.e. on an “out-of-sample” basis).

carefully considers the impact on the interpretation of each explanatory variable given the inclusion of the others, a point I return to below.

- (95) Dr. Erdem confuses the two goals of regression analysis throughout his report. In particular, he appears to evaluate whether or not to include variables, including his “distant subscriber” variable, *not based on whether it makes economic sense* (i.e. whether including the variable helps the econometric specification better fit the institutional and economic environment generating the data, leaving unaffected the interpretation of key parameters of interest) but only on *whether it has a statistical effect* (i.e. whether the variable is itself statistically significant or increases the overall adjusted R-squared in the regression).⁸⁶ As I show in what follows, Dr. Erdem’s use of a purely statistical approach to motivate the inclusion of his “distant subscriber” variable is a fundamental mistake that changes the interpretation of his regression coefficients in a way that renders his criticisms meaningless.

III.C.2.d.ii. Dr. Erdem’s “distant subscriber” variable double-counts programming minutes, with predictable effects on their coefficients

- (96) With this context in mind, I can now explain the implications for Dr. Erdem’s econometric regressions of including his “distant subscribers” variable. First, recall that a key (but unstated) component of his “distant subscribers” variable is the (weighted) number of distant broadcast signals carried by the system. Because the royalty paid by CSOs increases in the number of distant signals they carry, the introduction of this variable in his regression necessarily produces a *formulaic* positive relationship between a system’s royalties and Dr. Erdem’s “distant subscribers” variable. It is no surprise, then, that his “distant subscribers” always enters his regressions with a positive coefficient.⁸⁷
- (97) Notably absent from Dr. Erdem’s report is any discussion of the *economic rationale* for adding his measure of “distant subscribers.” His only discussion of this specification decision is to note that “both the number of subscribers and the number of distant subscribers could be relevant variables” and he therefore chooses to include both.⁸⁸
- (98) Also notably absent from Dr. Erdem’s report is any discussion of how the addition of his “distant subscribers” might alter the *interpretation* of the coefficients in Dr. Israel’s model. This is critically

⁸⁶ As Damodar Gujarati warns about Adjusted R-squared in his widely-used econometrics textbook, “Sometimes researchers play the game of maximizing [Adjusted R-squared], that is, choosing the model that gives the highest [Adjusted R-squared]. But this may be dangerous, for in regression analysis our objective is not to obtain a high [Adjusted R-squared] per se but rather to obtain dependable estimates of the true population regression coefficients and draw statistical inferences about them.” Gujarati, D., “Basic Econometrics, 4th Edition”, *McGraw-Hill*, 2003. Section 7.8, pp. 222-223.

⁸⁷ Erdem WDT, Exhibit 12, p. 44.

⁸⁸ Erdem WDT, p. 15.

important, as the interpretation of the impact of any one variable “controls for” the impact of all of the others.⁸⁹

- (99) An example illustrates how the addition of even a single variable can profoundly change the interpretation of a coefficient in an econometric regression. Suppose an econometrician was interested in the impact of an individual’s annual income on the decision to own a car. Using a sample of household-level data, she might run a regression of each person’s car ownership (measured as either a 0 or a 1) on their annual income and additional control variables, for example whether they live in a city, the size of their household, their age, etc. In such a regression, one would expect income to have a positive effect on car ownership: cars are useful but expensive goods and higher-income individuals are more able to pay for them. Suppose the econometrician then decided also to add a measure of the person’s *wealth*. This is reasonable as low-income individuals with high wealth may also choose to own cars and the econometrician may wish to capture this possibility in her analysis.
- (100) It would be unsurprising if the coefficient on the income variable became less positive or even statistically insignificantly different from zero once wealth was added to the regression. This is because the *interpretation* of the income coefficient is very different in the two regressions. In the first regression, one should interpret it as measuring the impact of an increase in income on an individual’s decision to own a car. (One could call this the “normal” interpretation.) In the second regression, however, the interpretation of the income coefficient changes: it is now interpreted as the impact of an increase in income on the individual’s decision to own a car *among individuals with the same wealth*. If it is wealth rather than income that ultimately influences car decisions, then income wouldn’t influence car ownership *at all* once one accounts for the impact of an individual’s wealth on their ownership decision. In such an environment, its coefficient in the second regression would likely be statistically indistinguishable from zero. As illustrated by this example, interpreting regression coefficients must be done very carefully when you have multiple variables that measure similar phenomena.
- (101) Dr. Erdem’s “refinements” to Dr. Israel’s regressions introduce just this kind of problem of interpretation. The reason is that important variation in Dr. Erdem’s “distant subscribers” is caused not by the number of subscribers to a cable system but by the (weighted) number of distant signals. Thus when the data compare the royalties between two systems, the second of which has one more distant signal than the first, not only are the programming minutes carried on the second system higher, *but so too are Dr. Erdem’s “distant subscribers.”*⁹⁰

⁸⁹ For more on this point, see the discussion in my direct testimony (Crawford WDT, ¶98).

⁹⁰ This effect is mediated by the fact that different numbers of weighted distant signals are multiplied by a cable system’s subscribers, but this is just a complicating factor. For expositional simplicity, I ignore this effect; none of my qualitative conclusions would be affected by accounting for it.

- (102) The correct interpretation of the key coefficients on the programming minute variables in Dr. Erdem's supplementary regressions are therefore very different than their interpretation in Dr. Israel's original regression. In Dr. Erdem's regression, they should be interpreted as the impact of an increase in the programming minutes of each type of programming, *controlling for the weighted number of distant signals multiplied by subscribers*.
- (103) Conceptualizing a change in minutes "controlling for the product of weighted distant signals and subscribers" is a complicated thought exercise, but its implications for Dr. Israel's key regression coefficients are easier to see. Consider the impact on royalties of a system's decision to carry one additional distant broadcast signal on all of its subgroups. This will change both the number of programming minutes carried by the system (according to the portfolio of types of minutes on that distant signal) as well as the weighted number of distant signals. Because subscribers are necessarily positive and the coefficient on "distant subscribers" is positive, the regression will necessarily attribute some if not all of the increased royalties to the increase in the "distant subscribers" and *not* to the additional programming minutes. This will *generally lower* the estimated value of those programming minutes.⁹¹ Indeed, comparing the coefficient estimates in Dr. Erdem's Model 0B (without his "distant subscribers" variable) and his Model 1B (with it), one sees exactly this pattern: all but one are less positive.
- (104) In a nutshell, Dr. Erdem's inclusion of "distant subscribers" *double-counts* the impact of changes in programming minutes on royalties that arise due to differences across systems in the number of carried distant signals. Because of this, his conclusion that "Dr. Israel's results are extremely sensitive to including the distant subscribers as a variable in the model, even though it is ... relevant and practically important" is simply wrong.⁹² Dr. Israel's results *are* sensitive to the inclusion of Dr. Erdem's "distant subscriber" variable, but for good reasons: it is measuring a thing very similar to the programming minutes that are of interest in this setting. As such, Dr. Erdem's argument does not represent a legitimate critique of Dr. Israel's regression results and should be disregarded.

III.C.3. Dr. Erdem's nonlinear transformations of certain explanatory variables has no economic justification and further muddies the interpretation of his parameters

- (105) After describing his conclusions regarding the inclusions of his "distant subscribers" variable, Dr. Erdem next turns to "variable transformations (i.e., [the] inclusion of nonlinear terms)."⁹³ In particular, he explores the consequences for Dr. Israel's analysis of including further covariates that

⁹¹ This relationship won't necessarily hold for *every* programming type coefficient due to the way regressions account for the idiosyncratic correlation patterns in the programming minutes, weighted number of distant signals, number of subscribers, and other control variables in the regression.

⁹² Erdem WDT, p. 14.

⁹³ Erdem WDT, p. 16.

accommodate nonlinearities in four variables: Dr. Israel's lagged subscribers, lagged total activated channels, and total broadcast channels, as well as his lagged "distant subscribers."

- (106) After presenting results from specifications including various powers-of-log transformations of these variables and demonstrating that the coefficients on the programming minutes from them imply zero royalty shares for at least some claimant groups, he concludes "The three models I present in Models 1A-4A [sic] not only present that estimated coefficients may change significantly with relatively minor model specifications, but they also incorporate important and necessary additions to the model. In fact, the addition of distant subscribers and non-linear transformations are corrections to Dr. Israel's model, as these models better represent reality and provide a better statistical fit."⁹⁴
- (107) As was the case for his analysis of his "distant subscribers" variable, Dr. Erdem takes an inappropriately statistical, prediction-oriented approach to his variable selection. Despite his completely unfounded claim that "these models better represent reality," there is no discussion of how the inclusion of such variables map better into the institutional and economic environment Dr. Israel's regression is seeking to describe.⁹⁵ Nor is there any discussion of the implications such specifications have for the interpretation of the critical coefficients on the programming minutes.
- (108) As all of these specifications include not only a linear measure of his "distant subscribers" variable but some nonlinear function of it as well, each of these regressions now "*double-and-log-power-counts*" minutes. While it is impossible to have a precise intuition about what this should do to the values of the key parameters on the programming minutes, it is a further example of Dr. Erdem's double-counting (and more) of programming minutes, invalidating his alternative regressions as a useful tool for evaluating the relative value of programming. For the same reasons as in the previous subsection, Dr. Erdem's criticism of the instability of Dr. Israel's key parameters in response to the addition of nonlinear explanatory variables is an invalid critique of Dr. Israel's regression, and of "Waldfoegel-type" regressions in general.

III.C.4. Dr. Erdem provides no reasons for dropping the observations he identifies as influential

- (109) A final example of Dr. Erdem's inappropriately statistical rather than economic approach to analyzing Dr. Israel's regression is his analysis of "influential observations" in Dr. Israel's data.
- (110) Dr. Erdem highlights that regressions using Ordinary Least Squares (OLS) techniques may be sensitive to particular observations in one's dataset and that there exist statistical methods to identify

⁹⁴ Erdem WDT, p. 17.

⁹⁵ Erdem WDT, p. 17.

such “influential observations.” He “appl[ies] th[ese] criteria to Dr. Israel’s sample” and re-estimates his and Dr. Israel’s models.⁹⁶

- (111) Based on his re-estimation, he finds that one of his models (Model 4B) provides estimates of royalty shares “broadly comparable to the results from both the Bortz and Horowitz surveys,” concluding that “[a]lthough there are strong reasons to doubt that comparability of the results is much more than a coincidence, I present them for whatever weight the Judges might choose to give them.”⁹⁷
- (112) Dr. Erdem’s decision to drop influential observations from Dr. Israel’s regressions is simply poor econometric practice, for two reasons. As described in a widely used econometrics textbook, care must be taken when dealing with influential observations:⁹⁸

Once influential observations have been identified it is tempting just to throw them away. *This would be a major mistake* [emphasis added]. Often influential observations are the most valuable observations in a data set.

- (113) Dr. Erdem’s first mistake is to fail to analyze *why* the identified observations are influential. While he correctly suggests “it is up to the researcher to understand what makes these observations influential,” he neglects to actually do so.
- (114) Dr. Erdem follows with a second mistake. He ultimately chooses to drop the influential observations from his econometric analyses, *but still uses them to calculate royalty shares*. If he believes the observations he identified as influential are so because of a data error (he does not say so one cannot know), then they should be dropped from both the regression analysis *and* the share calculations. Dropping them from the former but keeping them in the latter simply *can’t* be correct. For both of these reasons, all Dr. Erdem’s regression analyses accounting for influential observations, and his conclusions about them, should also be disregarded.

⁹⁶ Erdem WDT, pp. 17-18.

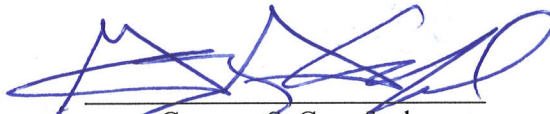
⁹⁷ Erdem WDT, p. 18.

⁹⁸ Kennedy, Peter. A Guide to Econometrics, Sixth Edition. Simon Fraser University. Blackwell Publishing, 2008.

DECLARATION OF GREGORY S. CRAWFORD

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 9/15/2017



Gregory S. Crawford

In the Matter of

CONSOLIDATED PROCEEDING
No. 14-CRB-0010-CD (2010-13)

September 15, 2017

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I. Background

- (1) I am a Principal at Bates White, LLC, an economic consulting firm with offices in San Diego, CA, and Washington, DC. Other than my new position at Bates White, my educational background, experience, and credentials were presented as part of my Written Direct Testimony submitted in this proceeding on December 22, 2016.
- (2) Staff at Bates White under my supervision assisted me with the preparation of this rebuttal analysis and report.

II. Overview and Scope of Opinions

- (3) I was asked by counsel for the Commercial Television Claimants (CTV) to review and analyze the viewing-related study presented in the Corrected and Amended Testimony of Jeffrey S. Gray, PhD, submitted in this proceeding on April 3, 2017 (“Gray Report”). I was also asked to provide analyses of certain program categorizations reflected in survey questionnaires presented by Program Suppliers witness Howard Horowitz and of certain data regarding the cable distant signal marketplace for use by other rebuttal experts appearing on behalf of CTV.
- (4) As part of this analysis, I reviewed the Gray Report together with Dr. Gray’s reliance materials, which include the Testimony of Paul Lindstrom and the Testimony of Jonda K. Martin. I also reviewed the pages from Mr. Horowitz’s questionnaires on which he identified programs on WGNA as being within certain program categories.
- (5) After reviewing these materials and conducting my own analysis, I have formed the following opinions:
- Dr. Gray’s samples are not representative of the populations of distant stations that were carried in each year between 2010 and 2013, because of at least two fundamental errors. As a result, Dr. Gray consistently overstates the volume and viewership of certain claimants’ programming while understating the volume and viewership of other claimants’ programming.
 - Dr. Gray incorrectly assigns thousands of programs to the wrong claimant groups.
 - Dr. Gray’s viewership study is flawed and unreliable because, among other things, he replaced 100% of the actual counts of distant households in the Nielsen sample with his own estimates.
 - These fundamental issues with Dr. Gray’s samples and with his viewership study, together with other conceptual and methodological issues discussed below, render Dr. Gray’s reported royalty shares biased and unreliable.
 - Even if relative program viewership actually did provide “a reasonable and reliable measure of the relative economic value of distantly retransmitted programming,”¹ Dr. Gray has not reliably measured relative program viewership.
 - Mr. Horowitz’s survey questionnaires erroneously identified certain programs within the Commercial Television Category as being “syndicated series” or “other sports” programs within the Program Suppliers Category.
- (6) An explanation of each of these opinions follows below.

¹ See Gray Report, ¶ 40.

III. Overview of Dr. Gray's report

- (7) As I understand it, Dr. Gray undertook to measure the relative amount of viewing by cable households of different categories of programs that aired on retransmitted distant stations.² I further understand that Dr. Gray extracted a sample of the distant stations in each year from 2010 through 2013 and provided lists of those sampled stations to Gracenote, Inc. (“Gracenote”).³ Dr. Gray also provided his list of sampled stations to Mr. Lindstrom, along with a list prepared by the Cable Data Corporation (“CDC”) showing the counties in which each of the sampled stations was “local” (i.e., not a distant signal).⁴ Gracenote then provided Dr. Gray with information in its database, if any, about programs that aired on the sampled stations; and Mr. Lindstrom provided Dr. Gray with information in the Nielsen database, if any, about cable household viewing of programming on sampled stations by quarter hour, with viewing by cable households separated between distant and local viewing.⁵ Mr. Lindstrom excluded viewing that was observed during quarter hours in which the programming was not compensable in this proceeding, which I understand includes Big 3 network programming and non-compensable programming on distant signal WGN.⁶
- (8) I understand from their testimony and supporting materials that all of the viewing data provided by Mr. Lindstrom to Dr. Gray was collected in cable households included in Nielsen’s National People Meter Sample⁷ and that Dr. Gray used unweighted household viewing counts rather than the weighted household viewing data that was also provided by Mr. Lindstrom.
- (9) I further understand that Dr. Gray does not directly include the measured Nielsen distant viewing data provided to him when calculating the volume and share of viewing by claimant category. Instead, he uses the data for local and distant viewing, where it was available, to develop a regression-based model purportedly describing the relationship between local viewing and distant viewing by program category and airing time.⁸ Then, in his ultimate viewing share analyses, Dr. Gray relies on distant household counts projected from his econometric model, supplanting all of the actual distant household counts in the Nielsen viewing data.

² Gray Report, ¶ 30.

³ Gray Report, ¶ 23.

⁴ Testimony of Paul B. Lindstrom, Dec. 22, 2016, (“Lindstrom Report”) at p.4.

⁵ Lindstrom Report at p.4; Gray Report, ¶ 23.

⁶ Gray Report, ¶ 27.

⁷ In his supporting materials, Mr. Lindstrom states that “[t]he current MPAA Local/Distant Viewing exposure is based on Stated Coded viewing in the National People Meter Sample” (PS-2010-13-C-002635-002637.pdf at p.1).

⁸ Gray Report, ¶ 36, and 37.

IV. Dr. Gray's sampling design is flawed, and his samples produce biased and imprecise estimates

- (10) In this section, I outline a number of methodological, sampling, and non-sampling errors that directly undercut the reliability of Dr. Gray's samples and calculations.
- (11) As a starting point for this discussion, it is helpful to consider a hypothetical setting that is free of sampling and non-sampling errors. In this setting, Dr. Gray would not have drawn a sample or categorized the programs; instead, he would have had available to him a complete enumeration of all programs, the claimant category to which each belonged, and the households viewing them. That is, Dr. Gray would have had available to him:
 - 1. The entire population of the programs that aired on each distantly retransmitted station, and the correct identity of the claimant category to which each program belonged
 - 2. The entire population of the distant households that viewed each of the programs that aired on the distantly retransmitted stations
- (12) In this hypothetical setting, the measurement of relative distant program viewership is accomplished by counting the number of distant households that viewed the programs within each claimant category. There is no sampling error in this hypothetical setting, since all programs and households are observed and accounted for, and there is no non-sampling error either, since the program information is complete, accurate, and correctly categorized.
- (13) By contrast, Dr. Gray had to contend with both sampling and non-sampling errors because he did not have data for either the entire population of distant signal programs or the entire population of distant households that viewed any of the distant signal programs. Indeed, in place of a complete enumeration of programs, Dr. Gray chose to rely on a sample of program bundles offered on a subset of distantly retransmitted stations. And in place of a complete enumeration of the distant households that viewed each program, Dr. Gray was supplied with viewing data for a sample of households covering some of the programs in his sample—data which he subsequently supplanted with his own estimates.
- (14) Dr. Gray's decision to rely on a statistical sample of programs, the sampling methodology he used, and errors in his implementation of this methodology give rise to errors that undercut the accuracy, precision, and reliability of his estimates of programming volume and viewership. In the remainder of this section, I provide a detailed description of Dr. Gray's sampling methodology, errors in his implementation of this methodology, and the impact that his choice of methodology and these errors had on the accuracy, precision, and reliability of his estimates.

IV.A. Dr. Gray's sampling design is prone to high sampling error and biased samples

- (15) When calculating programming volume and viewership, Dr. Gray relies on a sample of programs. However, Dr. Gray does not sample the programs directly. Rather, he samples stations. As a consequence, he draws into his sample only the programming bundles that were carried on his sampled stations. Specifically, Dr. Gray stratifies stations that were carried as distant signals in each year based on the number of distant subscribers to which they were carried. Dr. Gray then draws a random sample of stations from within each stratum,⁹ and, if Gracenote included a sampled station in its database, he includes the programs that were bundled and offered on that sampled station in his sample.
- (16) Dr. Gray's sampling of program bundles (i.e., sampling by station) is an example of cluster sampling. Relative to simple random sampling, cluster sampling is typically a lower-cost option. In this case, drawing a simple random sample of distantly retransmitted programs (by, say, airing date) would almost surely be more costly, as it would likely require program data from Gracenote for each and every station that was carried as a distant signal. By using cluster sampling, however, Dr. Gray is able to reduce the number of stations for which Gracenote data was required.
- (17) The disadvantage of cluster sampling is that it tends to be less precise and more prone to bias than simple random samples of equal size. This is because the individual clusters often contain a non-random and relatively homogeneous set of units.¹⁰ For example, it is well known that students are not randomly assigned to schools but instead generally attend the schools within their neighborhoods. As a result, students within schools (clusters) tend to be similar with respect to socioeconomic status and other characteristics, which means that cluster sampling, by selecting a sample of schools rather than students, tends to give rise to relatively homogeneous samples with high sampling error relative to samples of the same size chosen by other sampling designs.
- (18) This well-known disadvantage of cluster sampling is particularly relevant for Dr. Gray's study, because the programs belonging to claimant categories are often highly concentrated by station type. Indeed, Figure 1 below, which contains the average number of programs by claimant and station type (i.e., Canadian, educational, network, independent, or low power), shows just how sensitive the distribution of programming is to the type of station selected. For example, based on an analysis of Dr. Gray's own data, a single educational station, on average, contributes 12,366 additional Public Television ("PTV") programs to the sample and, hence, over- or undersampling of this station type has a dramatic impact on the volume and share of PTV programming. Similarly, the inclusion (or

⁹ Gray Report, ¶ 23.

¹⁰ See Paul S. Levy and Stanley Lemeshow, *Sampling of Populations: Methods and Applications*, 4th ed. (Hoboken, NJ: John Wiley & Sons, 2008), 228 [hereinafter "Levy and Lemeshow"].

exclusion) of a single Canadian station in Dr. Gray's data adds (or subtracts) an average of 11,021 Canadian programs. Other claimants' programming is also disproportionately carried on certain station types. For example, Program Supplier programs are disproportionately carried on independent and low-power stations, meaning that over- or undersampling of these station types will have a dramatic impact on the volume and share of Program Suppliers' content.

Figure 1: Average distribution of Gray's categorized programs by station type for 2010–2013.¹¹

Station Type	Canadian	CTV	Devotional	Program suppliers	PTV	JSC
Canadian	11,021	20	8	1,605	0	0
Educational	0	0	5	0	12,366	0
Independent	0	1,481	1,170	9,325	0	36
Low-power	0	2,267	787	11,135	0	35
Network	0	2,353	59	3,488	0	6

- (19) As documented in Section IV.D below, Dr. Gray's samples tend to be skewed by station type and therefore also skewed in their representation of claimant minutes. Dr. Gray could have prevented this source of bias and ensured the correct representation by station type in his samples had he included station type as a stratification variable. Instead, Dr. Gray has chosen to stratify only by the number of distant subscribers and, in doing so, actually amplifies the additional sampling variability and potential for bias brought about by his use of cluster sampling.
- (20) To help illustrate this point, consider Figure 2 below, which shows the counts of stations in Dr. Gray's sampling frame by stratum in 2010, along with the number of sampled stations and the sampling weight that Dr. Gray has attached to stations in each stratum. The figure shows, for example, that Dr. Gray samples 22 stations to represent the 632 stations in his bottom stratum, with each of these 22 stations being assigned a sampling weight equal to 28.73 ($632/22$). Because each PTV station accounts for approximately 12,366 programs, the random selection of a single educational station from among the 632 stations in the bottom stratum will cause Dr. Gray's extrapolated number of educational programs to swing by as much as 355,275 ($28.73 \times 12,366$). Similarly, the random selection of a single Canadian station from among the 632 stations in the bottom stratum will cause Dr. Gray's extrapolated number of Canadian programs to swing by as much as 316,633 ($28.73 \times 11,021$). This same problem was present in each of the years covered by Dr. Gray's study.

¹¹ Note that Figure 1 is based on the program data presented by Dr. Gray, which reflects obvious program categorization errors. For example, his data show CTV programs—and no JSC programs—appearing on Canadian stations and Devotional programs appearing on PTV stations, both of which are incorrect in light of the category definitions and the data analyses I performed in connection with my Written Direct Testimony in this proceeding. Notwithstanding these categorization errors, however, Figure 1 demonstrates that, given the station type disparities that appeared in his own data, Dr. Gray's failure to control for those disparities in his sample selection produces unreliable results.

Figure 2: Distribution of sampled stations by stratum in 2010¹²

Stratum	Sampling frame	No. of sampled stations	Sampling weight
1	632	22	28.73
2	310	23	13.48
3	158	30	5.27
4	110	49	2.24
5	29	29	1.00

IV.B. Dr. Gray's sampling frame is wrong

- (21) A sampling frame is an enumeration of the items from which a sample is selected. Ideally, the sampling frame will be identical to—and therefore representative of—the target population that one seeks to study. When this is not the case, a sample drawn from the sampling frame may not suitably represent the target population.¹³
- (22) In this matter, Dr. Gray's purported target population is the set of programs (by count, minutes, and total viewers) that aired on "all stations distantly retransmitted by CSOs in every royalty year."¹⁴ Yet his sampling frame includes more "stations" than are in his target population. This misalignment between target population and sampling frame—which impacts the reliability of his samples—arose because Dr. Gray failed to expunge a number of duplicate stations from the CDC list of distantly retransmitted stations upon which he relied.¹⁵
- (23) Dr. Gray's failure to expunge duplicate stations from his sampling frame is evident from Figure 3, which compares the number of stations in Dr. Gray's sampling frame to the number of stations that were actually carried as distant signals in each year from 2010 to 2013.

¹² Again, this figure uses Dr. Gray's own sampling frame and sampling weight numbers. As is shown in the following sections, he determines both of these incorrectly in each of the study years.

¹³ See, e.g., David E. McNabb, *Nonsampling Error in Social Surveys* (Los Angeles: Sage Publications, Inc., 2014) [hereinafter McNabb], Chapter 5.

¹⁴ Gray Report, ¶ 23.

¹⁵ Duplication is an "error that occurs when the frame list is released without close scrutiny for duplicate entries or when master lists are not checked for accuracy. . . . The main problem with multiple listings is that, when a unit is represented more than once on the frame list, the probability of that unit being selected is different from that of other units in the survey—a violation of the random sample selection procedure" (McNabb, 86). The CDC's list of distantly retransmitted stations reflects the list of call sign signs as reported by CSOs, and it contains many instances in which different CSOs report different versions of a call sign for the same station (e.g., CBUT and CBUT-DT).

Figure 3: Counts of stations carried as distant signals and in Dr. Gray's sampling frame, by year¹⁶

Year	Sampling Frame	Population
2010	1,239	1,169
2011	1,338	1,320
2012	1,382	1,370
2013	1,398	1,369

- (24) This error is also evident in the list of sampled stations that Dr. Gray reports in Appendix B of his written testimony, an excerpt of which is shown in Figure 4 below. In this excerpt, the Canadian station CBUT-DT shows up twice in Dr. Gray's sample for 2010, first as CBUT-DT and then again as CBUT. The two are simply different designations for the same station, with the same programming.

Figure 4: Partial list of Dr. Gray's sampled stations

2010		2011		2012		2013	
Station	Distant Subscribers	Station	Distant Subscribers	Station	Distant Subscribers	Station	Distant Subscribers
WGN-DT	41,361,722	WGN-DT	43,106,794	WGN-DT	42,459,172	WGN-DT	42,522,609
WLIW-DT	743,494	CBUT	966,581	CBUT	868,203	CBUT	893,666
WNET-DT	661,353	WLIW-DT	680,208	WLIW-DT	613,759	WLIW-DT	644,340
WPIX-DT	605,742	WNET-DT	643,737	WPIX-DT	590,292	WPIX-DT	571,383
CBUT-DT	519,880	WPIX-DT	611,976	WBRE-DT	589,716	WNET-DT	516,323
WUAB-DT	502,043	WNET-DT	443,643	WNET-DT	515,030	CKSH	367,635
CBUT	495,028	WLRN-DT	440,554	WNET-DT	432,652	KZSW-LP	356,147

Source: Appendix B attached to Testimony of Jeffrey S. Gray, PhD.

- (25) Dr. Gray's failure to remove duplicate stations—see Appendix A for a complete list—distorts his count of unique stations, his assignment of stations to individual strata, and the sampling weights that he calculates based on his incorrect station count. The potential effects include the following:
- Double-counting some stations in the sampling frame, which changed the likelihood of selection for all stations outside the top stratum; and
 - Where both versions of the duplicative station were selected, such as for CBUT above in 2010, overrepresentation of the duplicate station in the sample, and the exclusion of a non-duplicate station from the sample; and
 - Incorrect sampling weights being applied to sampled stations in strata with one or more of the duplicative stations

¹⁶ For the purpose of this table, a pair of call signs with the following suffixes are treated as the same signal: "No suffix and DT", "No suffix and HD", "DT and HD", "LD and LP", "CD and LP", "CA and CD", and "CA and LP".

IV.C. Dr. Gray's sampling weights are wrong

- (26) As noted in the previous section, Dr. Gray incorrectly calculates his sampling weights based on sampling frames that do not match the population of retransmitted distant stations. In this section, I describe how the errors in Dr. Gray's sampling weights are further compounded by the fact that Dr. Gray has dropped sampled stations that did not have coverage in the Gracenote data.
- (27) Figure 5 below shows the number of sampled stations with Gracenote data by year. In total, Dr. Gray is forced to drop 24 (or 3.9%) of his 609 sampled stations because of missing Gracenote data.

Figure 5: Distribution of sampled stations with Gracenote data

Year	Sampling Frame	Sampled Stations	Sampled Stations with Gracenote Data
2010	1,239	153	145
2011	1,338	153	148
2012	1,382	152	146
2013	1,398	151	146
Total	5,357	609	585

- (28) While Dr. Gray samples 153 stations in 2010, his extrapolation is based only on the 145 stations for which Gracenote data were available. Moreover, the number of dropped stations varied by stratum, which introduced a further disparity due to differential weighting. For example, as shown in Figure 6 below, 22 stations are sampled by Dr. Gray to represent the 632 stations in his bottom stratum in 2010, but only 21 stations—representing approximately 603 of the 632 stations in the bottom stratum—are included in his extrapolations for 2010. Yet Dr. Gray does not adjust his weighting to account for the different number of missing stations across the strata. The impact of this error applies in each of Dr. Gray's station samples, as reflected in Figures 6–9 below.

Figure 6: Distribution of sampled stations by stratum in 2010

Stratum	Sampling frame	No. of sampled stations	No. of sampled stations with programming data	Sampling weight
1	632	22	21	28.73
2	310	23	23	13.48
3	158	30	27	5.27
4	110	49	46	2.24
5	29	29	28	1.00

Figure 7: Distribution of sampled stations by stratum in 2011

Stratum	Sampling frame	No. of sampled stations	No. of sampled stations with programming data	Sampling weight
1	706	20	20	35.30
2	325	21	21	15.48
3	162	23	20	7.04
4	116	60	58	1.93
5	29	29	29	1.00

Figure 8: Distribution of sampled stations by stratum in 2012

Stratum	Sampling frame	No. of sampled stations	No. of sampled stations with programming data	Sampling weight
1	759	19	19	39.95
2	317	17	16	18.65
3	156	20	19	7.80
4	105	51	50	2.06
5	45	45	42	1.00

Figure 9: Distribution of sampled stations by stratum in 2013

Stratum	Sampling frame	No. of sampled stations	No. of sampled stations with programming data	Sampling weight
1	792	19	19	41.68
2	315	20	18	15.75
3	149	22	22	6.77
4	96	44	43	2.18
5	46	46	44	1.00

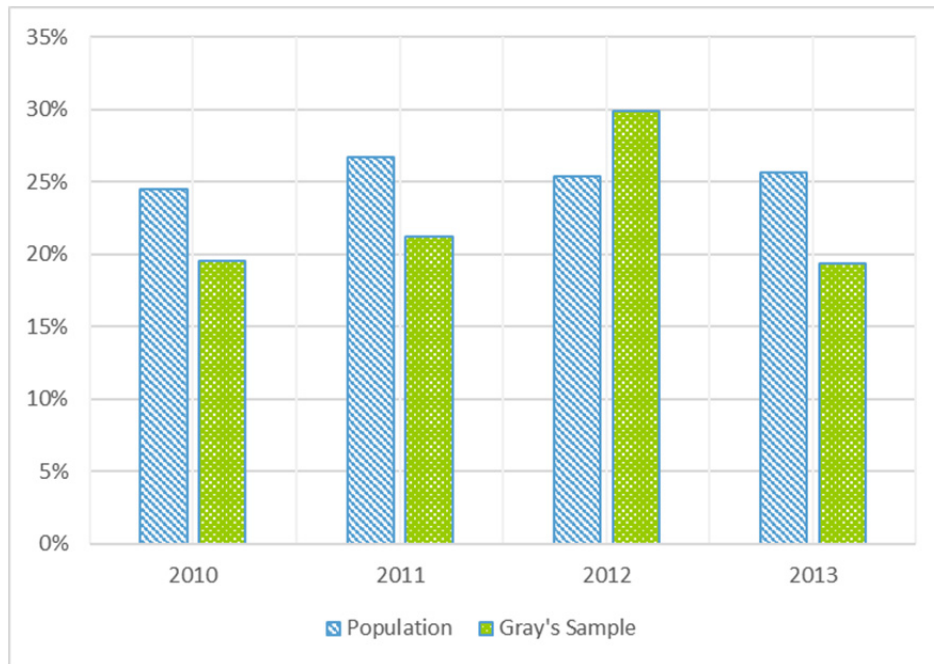
IV.D. Dr. Gray's samples do not account for programming differences by station type

- (29) Dr. Gray fails to produce samples that were proportionately representative of the various station types in the population. Consequently, Dr. Gray's samples yield demonstrably biased results, as is evident from his own summary tables.
- (30) Dr. Gray claims that “[a]cross the 2010–2013 Cable Royalty years, with the exception of 2012, each claimant category’s share of the total number retransmissions and the volume of retransmissions is relatively steady.”¹⁷ In an attempt to explain the exception, Dr. Gray asserts that “[i]n 2012, there were significantly more public television station retransmissions in the sample. . . .”¹⁸
- (31) However, Dr. Gray does not assess how his sample compared to the actual population of distant signals in any given year, whether his higher reported number of public television station retransmissions in 2012 reflected sampling error, or whether the “relatively stable” shares outside of 2012 may have been a statistical artifact relating to consistent over- or undersampling of specific claimant groups’ content.
- (32) Figure 10, which compares the proportion of educational stations in Dr. Gray’s sample (green bars) and in the population (blue bars), shows that the share of educational stations in the population ranged between 26% and 28% of all retransmitted stations across the relevant period and was therefore relatively stable over the entire period. In contrast, Dr. Gray consistently undersamples educational stations in 2010, 2011, and 2013, by as much as 6%, and he oversamples educational stations in 2012 by 6%.

¹⁷ Gray Report, ¶ 33.

¹⁸ *Id.*

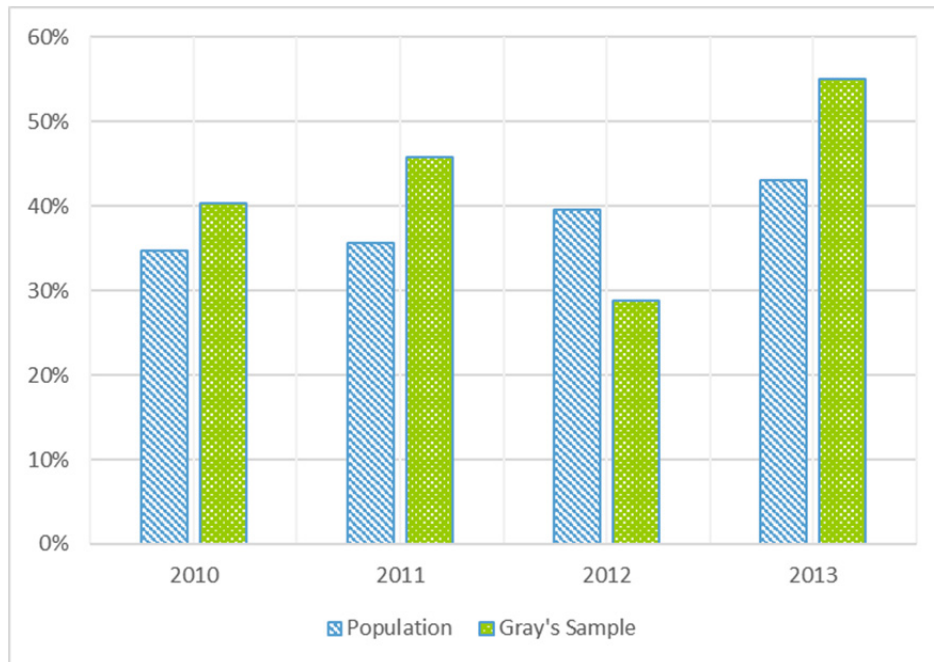
Figure 10: Proportion of educational stations in Dr. Gray's sample vs. the population



- (33) Dr. Gray's oversampling of public television stations compared with those actually carried in 2012 explains the jump in the number and volume of retransmissions of educational programming that he reported for the 2012 cable royalty year. Moreover, Dr. Gray's undersampling of educational stations for the 2010, 2011, and 2013 cable royalty years means that his sample underreports the number and volume of retransmissions of educational programming carried in these years. It also raises an additional question about which commercial stations made up for the shortfall in his sample for these years.
- (34) Figure 11 below, which compares the proportion of independent stations in Dr. Gray's sample (green bars) and in the population (blue bars), shows that Dr. Gray's sampling protocol tends to make up for the undersampling of educational stations by oversampling independent stations. In particular, with the exception of 2012,¹⁹ Dr. Gray's sampling protocol consistently oversamples independent stations in 2010, 2011, and 2013, by as much as 9%.

¹⁹ Dr. Gray's sampling protocol results in a 11% shortfall of independent stations in 2012.

Figure 11: Proportion of independent stations in Dr. Gray's sample vs. the population



- (35) As is shown in the next section, the patterns of oversampling by station type are clearly evident in Dr. Gray's own estimates of programming volume for each claimant.

IV.E. Dr. Gray's flawed samples yield biased and imprecise estimates

- (36) In Table 1 of his written testimony, Dr. Gray presents estimates of the number of compensable programs and the volume (in minutes) of compensable programming, but he fails to assess the accuracy or precision of his estimates. In this section, I demonstrate that Dr. Gray's estimates are imprecise and document evidence of bias.
- (37) The statistical software package that Dr. Gray used in his analysis is equipped to handle complex sampling designs, thereby making it easy to calculate a 95% confidence interval for each of the estimates that he presents in his Table 1. Because each 95% confidence interval takes the form

$$\text{estimate} \pm \text{margin of error},$$

each confidence interval is completely characterized by its margin of error ("MOE"): a smaller MOE is associated with a narrower confidence interval and is indicative of greater precision.

- (38) Figure 12 below shows Dr. Gray's estimated number of compensable programs (which he refers to as "Retransmissions") for each claimant group together with their associated MOEs. The MOEs are large, generate wide confidence intervals and are indicative of low precision. For example, Dr. Gray's

95% confidence interval for Canadian programs in 2010 is $58,812 \pm 49,369$. Similarly, Dr. Gray's 95% confidence interval for PTV programming in 2012 is $5,316,379 \pm 2,337,521$.

Figure 12: Dr. Gray's estimated number of claimant programs and their associated MOEs at the 95% confidence level

Year	Canadian	CTV	Devotional	Program Suppliers	PTV	JSC
2010	58,812 $\pm 49,369$	1,441,959 $\pm 311,922$	960,034 $\pm 685,373$	6,848,477 $\pm 1,447,898$	3,023,424 $\pm 1,409,238$	19,693 $\pm 10,121$
2011	206,553 $\pm 302,437$	1,482,977 $\pm 295,427$	1,769,985 $\pm 1,291,654$	7,868,472 $\pm 1,774,213$	3,221,460 $\pm 1,715,541$	25,551 $\pm 16,195$
2012	193,326 $\pm 209,572$	1,933,045 $\pm 635,198$	710,162 $\pm 856,164$	5,075,584 $\pm 1,582,408$	5,316,379 $\pm 2,337,521$	16,774 $\pm 12,371$
2013	115,240 $\pm 82,515$	2,040,621 $\pm 957,411$	984,046 $\pm 1,103,317$	7,192,805 $\pm 1,653,019$	3,818,654 $\pm 1,855,874$	29,661 $\pm 13,067$

- (39) Beyond the large MOEs, it is worth noting the patterns in the estimates and, in particular, evidence of bias in the estimates for the various claimants that permeates each of Dr. Gray's analyses. First, while the estimated number of PTV programs in 2012 is more than 39% higher than in any other year, we know that Dr. Gray oversamples educational stations in 2012 (see Figure 10), which means that his estimate of PTV programs for this year is biased high. Conversely, the fact that Dr. Gray undersamples educational stations in each of 2010, 2011, and 2012 means that his estimates of PTV programs for these years is biased low. The opposite pattern holds true for independent stations, thereby suggesting that Dr. Gray overestimates Program Supplier programming in 2010, 2011, and 2013, while underestimating the programming for this claimant in 2012.
- (40) The uncertainty in Dr. Gray's extrapolation of program counts obviously affects the precision of Dr. Gray's associated calculations of the "Share of All Retransmissions" for each category. This is made explicit in Figure 13 below, which shows that the MOEs for each of Dr. Gray's share estimates are also large.

Figure 13: Dr. Gray's estimated claimant program shares and their associated MOEs at the 95% confidence level

Year	Canadian	CTV	Devotional	Program Suppliers	PTV	JSC
2010	0.48% ± 0.40%	11.67% ± 3.22%	7.77% ± 5.46%	55.44% ± 10.52%	24.48% ± 10.94%	0.16% ± 0.08%
2011	1.42% ± 2.08%	10.17% ± 2.42%	12.14% ± 8.65%	53.99% ± 11.93%	22.10% ± 11.47%	0.18% ± 0.11%
2012	1.46% ± 1.58%	14.59% ± 5.55%	5.36% ± 6.39%	38.32% ± 12.34%	40.14% ± 15.47%	0.13% ± 0.09%
2013	0.81% ± 0.59%	14.39% ± 6.65%	6.94% ± 7.62%	50.72% ± 11.86%	26.93% ± 12.30%	0.21% ± 0.09%

- (41) Figure 14 below shows Dr. Gray's estimated number of compensable program minutes (which he calls "Minutes of Retransmissions") for each claimant group together with their associated MOEs. Similar to the MOEs for Dr. Gray's estimates of program counts, these MOEs are also large, generate wide confidence intervals, and are indicative of low precision.

Figure 14: Dr. Gray's estimated number of claimant program minutes and their associated MOEs at the 95% confidence level

Year	Canadian	CTV	Devotional	Program Suppliers	PTV	JSC
2010	2,337,432 ± 2,006,676	64,434,468 ± 15,552,110	40,909,968 ± 29,916,482	268,348,832 ± 55,612,334	122,528,736 ± 56,674,211	3,325,946 ± 1,746,588
2011	10,210,376 ± 16,012,359	68,661,584 ± 13,887,668	66,802,396 ± 48,324,760	302,393,184 ± 67,559,899	128,137,416 ± 67,127,899	4,058,349 ± 2,472,367
2012	7,527,288 ± 7,970,171	104,885,200 ± 37,357,565	30,242,208 ± 36,480,641	203,009,680 ± 64,791,269	219,327,680 ± 91,483,776	2,851,534 ± 2,255,801
2013	4,751,082 ± 3,460,440	87,037,064 ± 33,245,449	39,319,352 ± 42,192,630	319,198,368 ± 72,616,095	158,263,488 ± 70,598,079	4,482,877 ± 1,819,861

- (42) As with his program counts and shares, the relatively large uncertainty in Dr. Gray's extrapolated programming minutes obviously affects the precision of Dr. Gray's estimates of programming minute shares ("Share of All Volume"). This is made explicit in Figure 15 below, which shows that the MOEs for each of Dr. Gray's programming minute share estimates is also large.

Figure 15: Dr. Gray's estimated number of claimant program minutes and their associated MOEs at the 95% confidence level

Year	Canadian	CTV	Devotional	Program Suppliers	PTV	JSC
2010	0.47% ± 0.40%	12.84% ± 3.70%	8.15% ± 5.83%	53.47% ± 10.28%	24.41% ± 10.81%	0.66% ± 0.34%
2011	1.76% ± 2.75%	11.83% ± 2.77%	11.51% ± 8.20%	52.11% ± 11.39%	22.08% ± 11.29%	0.70% ± 0.42%
2012	1.33% ± 1.41%	18.47% ± 6.99%	5.33% ± 6.34%	35.75% ± 11.47%	38.62% ± 14.72%	0.50% ± 0.39%
2013	0.77% ± 0.57%	14.20% ± 5.64%	6.41% ± 6.81%	52.07% ± 11.15%	25.82% ± 11.14%	0.73% ± 0.28%

- (43) Overall, Dr. Gray's estimates are imprecise and show signs of bias that are consistent with his oversampling of certain station types.

V. Dr. Gray's assignment of programs to claimant categories is flawed and unreliable

- (44) As part of his analysis, Dr. Gray assigns programs airing on stations in his samples to one of the claimant categories. However, Dr. Gray fails to examine key relevant information in the Gracenote data, which causes him to incorrectly assign thousands of programs to the wrong claimant categories. In this section, I provide examples of such errors.
- (45) First, Dr. Gray fails to consider Gracenote's title and program type field when assigning programs to the Canadian claimant category. As a result, Dr. Gray incorrectly assigns every single live telecast of professional and college team sports—including live telecasts of NBA, NHL, and NFL games—on Canadian stations to the Canadian category.²⁰
- (46) Second, Dr. Gray fails to consider whether a program was syndicated before assigning it to the Devotional category. In his algorithm, Dr. Gray simply assigns all of the "Religious" programs airing on US broadcast stations to the Devotional category.²¹ As a result, non-syndicated religious programs were incorrectly assigned to the Devotional category rather than to the CTV category.

²⁰ I counted at least 2,900 live telecasts of professional and college team sports in Dr. Gray's Canadian category.

²¹ Dr. Gray uses Gracenote's program type field to determine whether a program is "Religious." Dr. Gray subsequently moves some of these programs to the Program Supplier category; however, he never corrects his mis-categorization of non-syndicated religious programs.

VI. Dr. Gray's distant viewing analysis is flawed and unreliable

- (47) Even if Dr. Gray's samples were reliable—which they are clearly not—his measure of distant viewership for compensable programs carried by stations in his samples is flawed and unreliable. Moreover, the royalty shares Dr. Gray extrapolates from his unreliable samples based on his invalid viewing measure are invalid and unreliable.

VI.A. Dr. Gray relies on an imputed measure of distant viewership in place of Nielsen's reported measure of viewership

- (48) In Table 2 of his report, Dr. Gray reports his extrapolated distant viewing levels and shares. When performing these calculations, however, Dr. Gray does not use the distant household viewing counts or households weights as reported by Nielsen for the compensable programs carried by stations in his samples. Instead, Dr. Gray relies on his own (unweighted) estimates of distant viewing.
- (49) Dr. Gray purportedly resorts to estimating (or imputing) distant viewing records because “there are many instances of no recorded distant viewing of compensable retransmitted programs in the Nielsen Household Meter Data.”²² In fact, as shown in Figure 16 below, Dr. Gray is without any distant viewing record for more than 90% of the programming in his samples, and he is without any local viewing records for more than 55% of the programming in his samples.

Figure 16: Volume of programming with no viewership data

Year	Volume of programming (by quarter hours) in Dr. Gray's database	Percent with no distant viewing record	Percent with no local viewing record
2010	4,218,107	93.1%	58.5%
2011	4,403,291	94.2%	59.2%
2012	4,269,586	93.7%	63.1%
2013	4,523,526	95.3%	64.9%

- (50) To impute the missing distant viewing records, which accounted for more than 90% of his data, Dr. Gray relies on a regression that relates distant viewing to a measure of local viewing, and other controls.²³ Then, without explanation or support, Dr. Gray uses this same regression to replace the

²² Gray Report, ¶ 35.

²³ Beyond his measure of local viewing, Dr. Gray includes the (log of) distant subscribers, the quarter hour in which a program aired, and Gracenote's program type as controls in his regressions.

actual distant viewing records as provided by Nielsen, meaning that Dr. Gray imputes 100% of the distant viewing values that he relies on in his extrapolation.²⁴

- (51) The fact that Dr. Gray relies entirely on his own (flawed) estimates—thereby supplanting all of the actual viewing data provided by Nielsen—further undermines the reliability of his viewing analysis.

VI.B. Dr. Gray’s imputed measure of distant viewership is flawed and unreliable

- (52) Dr. Gray claims that he could “obtain reliable estimates of distant viewing” from a regression analysis that estimates the relationship between distant viewing for a program and a measure of local viewing for the program, plus other controls. Of course, one needs data on distant viewing and local viewing in order to estimate a relationship between these variables.
- (53) With relatively few records for both distant and local viewing, Dr. Gray tops up his regression data set by replacing missing distant and local viewing records with zeros. Indeed, Figure 17 shows that the bulk of the programming in Dr. Gray’s regression analysis is without a distant viewing record, without a local viewing record, or without both. The top row of the figure, for example, shows that more than 50% of the programming in Dr. Gray’s regression data set was without any information at all on local and distant viewing. For this programming, Dr. Gray replaces the missing local and distant viewing with zeros. The second and third rows show programming for which Nielsen provided Dr. Gray with a local or distant viewing record, but not both. For this programming, Dr. Gray replaces the missing record with a zero. Finally, the fourth row shows the small subset of Dr. Gray’s regression database that reflected actual distant and local viewing records as provided by Nielsen.

Figure 17: Distribution of samples included in Dr. Gray’s regressions

Missing distant	Missing local	2010	2011	2012	2013
Yes	Yes	1,790,734	1,812,993	1,889,602	1,983,710
Yes	No	1,532,078	1,599,705	1,384,072	1,439,102
No	Yes	69,339	58,645	77,890	64,049
No	No	219,716	197,824	190,094	149,723

- (54) Dr. Gray’s practice of equating missing records with zero viewing lacks foundation and undermines the reliability of his regression analysis. First, Dr. Gray offers no logical explanation for why zero might be the correct value to use in place of a missing record. If anything, Dr. Gray suggests that records were missing “[d]ue to the low frequency of distant viewing and the size of the sample

²⁴ Dr. Gray “employed multiple regression analysis techniques and applied [his] analysis to the [sic] all programs eligible for compensation.” [Gray Report, ¶ 36] (emphasis added)

Nielsen uses to measure total U.S. household viewing,”²⁵ meaning that the true viewing associated with missing records may be something other than zero. Second, Dr. Gray offers no explanation for the apparent contradiction that arises from this practice: either the missing values truly correspond to zero viewing and the regressions serve no purpose—why estimate a known quantity—or the true values of the missing records potentially differ from zero, in which case Dr. Gray has imposed an incorrect assumption that biases the estimated relationship between distant and local viewing.²⁶

VI.C. Dr. Gray’s “measure” of local viewing is flawed and unreliable

- (55) A key variable in Dr. Gray’s regressions is “a measure of local viewing” for a program.²⁷ However, nowhere in his report does Dr. Gray elaborate on exactly what his “measure” of local viewing is; nor does Dr. Gray explain how it could possibly be calculated when the majority of programming in his sample is without a local viewing record.
- (56) Dr. Gray’s reference to a “measure of local viewing” is misleading, since the variable that he includes in his regression is, in fact, not a reliable measure of local viewing. To see why, consider first that Dr. Gray calculates his “measure” of local viewing based on the ratio of local viewing—when local viewing was available—to the total number of subscribers (local *and* distant) that received a station. Dr. Gray’s inclusion of distant subscribers in his “measure” of local viewing means that, all else equal, he will assign higher local viewing to a station with the fewest distant subscribers, and vice versa. For example, Dr. Gray calculates his “measure” of local viewing for a compensable program that aired on WGN in 2010 as the (unweighted) number of local viewing households reported by Nielsen divided by 46,389,224, which includes 41,361,722 distant subscribers reported by the CDC.
- (57) Dr. Gray is unable even to calculate that counterintuitive “measure” from the Nielsen data for more than half of the programming in his database. For the bulk his data—i.e., for programming in his regression database with no local viewing data—Dr. Gray was provided with no record for local viewing and he simply equates missing local viewing with zero viewing.²⁸

²⁵ Gray Report, ¶ 35,

²⁶ All else equal, replacing missing observations with zeros alters Dr. Gray’s regression estimates and his shares of distant viewing.

²⁷ Gray Report, ¶ 36.

²⁸ As noted in Figure 17, Dr. Gray excludes from his regressions station programming that was without a single local viewing record in a given year. In his extrapolation, however, Dr. Gray includes such programming by assuming that the number of local viewing households was equal to the average local viewing for all other programs of the same type that aired at the same time.

VI.D. Dr. Gray does not use sampling weights when estimating his econometric model

- (58) When estimating his regressions, Dr. Gray does not use the sampling weights (however flawed) that he calculated for the stations in his samples. As a result, Dr. Gray's regressions summarize the relationship among variables in his sample as if the unweighted stations in his sample are an accurate representation of the whole population, which they are not.
- (59) It is well known that ignoring sampling weights produces biased estimates of population parameters (in this case programming volume, viewing, and shares). For example, an article in *The Stata Journal* succinctly states:

If sampling weights are ignored, then the sampling distributions of unweighted statistics underrepresent the values of the random variables associated with low selection probabilities and overrepresent the values associated with high selection probabilities. As a result, unweighted statistics are biased for population parameters they estimate. The effects of clustering and unequal weights are detrimental for statistical inference and so analysts and researchers need to account for them.²⁹

- (60) To assess the impact of including Dr. Gray's sampling weights in his regressions, I re-estimated his models with his sampling weights included. Figure 18 shows that the inclusion of Dr. Gray's sampling weights in his regressions would materially alter his royalty shares, resulting in particular in a reduction in the Program Suppliers share. It is important to note, however, that correction of this methodological error still does not produce valid or reliable viewing shares, in light of Dr. Gray's other errors.

²⁹ Kolenikov, S. "Resampling variance estimation for complex survey data". *The Stata Journal*, Vol. 10, No. 2, 2010, p. 167.

Figure 18: Dr. Gray's implied royalty shares using his sampling weights (original shares in parentheses)

Year	Canadian	CTV	Devotional	Program suppliers	PTV	JSC
2010	2.05% (1.96%)	23.89% (15.83%)	0.83% (1.18%)	44.87% (50.94%)	26.44% (27.96%)	1.92% (2.13%)
2011	4.86% (3.93%)	12.37% (12.06%)	1.62% (2.44%)	44.12% (49.92%)	33.83% (29.09%)	3.21% (2.57%)
2012	5.29% (3.58%)	21.15% (15.48%)	0.61% (1.07%)	28.53% (36.17%)	41.79% (41.64%)	2.63% (2.06%)
2013	3.86% (5.31%)	13.75% (10.64%)	1.43% (1.09%)	48.60% (44.69%)	29.41% (33.47%)	2.96% (4.80%)

VI.E. Dr. Gray's imputed measure is demonstrably biased

- (61) To assess the reliability of Dr. Gray's measure of distant viewership, I examined how his estimates compared with the records provided by Nielsen. This comparison reveals a bias in Dr. Gray's estimates that further undermines the reliability of his royalty share calculations.
- (62) First, by looking at individual stations, it is apparent that Dr. Gray's regression estimates suggest a significant number of distant viewing households for some stations where the Nielsen data had recorded few or none. For example, as illustrated in Figure 19 below, Dr. Gray's regression estimates produce a significant number of distant viewing households for WSJX-LP, which had zero distant viewing records in the Nielsen sample.

Figure 19: Number of distant viewing household quarter-hours of compensable WSJX-LP programming

Year	Nielsen	Dr. Gray
2010	0	9,426
2011	0	6,723
2012	0	4,917
2013	-	-

Notes: The figures represent the total number of distant household quarter hours viewed of compensable WSJX-LP programming in a given year, as reported by Nielsen and estimated by Dr. Gray. The totals are missing for 2013 because Dr. Gray does not sample WSJX-LP in 2013.

- (63) For other stations, Dr. Gray's regression estimates are substantially lower than the distant viewing that was reported by Nielsen. For example, as illustrated in Figure 20 below, Dr. Gray's regression estimates for WJZ-DT produce significantly lower distant viewing than the Nielsen sample, thereby eliminating distant viewing households that were actually measured and reported by Nielsen. Dr. Gray simply has no basis for eliminating households and presenting a so-called "reliable measure of distant viewership" that is *less* than what was *actually* measured and reported by Nielsen.

Figure 20: Number of distant viewing household quarter-hours of compensable WJZ-DT programming

Year	Nielsen	Dr. Gray
2010	7,432	2,129
2011	-	-
2012	2,400	1,843
2013	2,588	1,390

Notes: The figures represent the total number of distant households that viewed compensable WJZ programming in a given year, as reported by Nielsen and then as estimated by Dr. Gray. The totals are missing for 2011 because Dr. Gray does not sample WJZ in 2011.

- (64) Not only do Dr. Gray's regression estimates create new viewing households and eliminate others, they do so in a manner that benefits certain claimants' supposed viewing shares while reducing other claimants' shares. Figure 21 below, for example, shows that, relative to the Nielsen survey, Dr. Gray's reliance on his regression estimates substantially increases the number of distant viewing households for Program Suppliers and PTV content, while decreasing the total number of distant viewing households in some years for CTV and Canadian content.

Figure 21: Aggregate difference between distant household quarter hours estimated by Dr. Gray and reported by Nielsen

Year	Program Suppliers	JSC	CTV	PTV	Devotional	Canadian
2010	9,070	-37,111	11,549	306,228	115,271	16,230
2011	27,912	54,637	23,696	287,194	95,615	16,867
2012	-24,370	55,642	10,225	237,623	187,807	6,114
2013	29,027	-7,937	4,927	75,238	66,073	17,173
Total	41,638	65,232	50,398	906,282	464,767	56,384

Notes: The figures represent the difference in the extrapolated number of household quarter hours. A negative number indicates that Dr. Gray's estimated number of distant viewing household quarter hours is lower than the number actually reported by Nielsen.

- (65) Figure 22 shows the percentage point difference in the implied shares between Dr. Gray's estimated number of distant viewing households and the number of distant viewing households actually measured by Nielsen. For example, the figure shows that, relative to the actual distant viewing reported by Nielsen, Dr. Gray's imputation increased the Program Suppliers' share of distant viewing in 2010 by 11.98 percentage points. Similarly, in the same year, Dr. Gray's imputation decreased the CTV's share of distant by 11.23 percentage points relative to the share implied by the actual distant viewing reported by Nielsen.

Figure 22: Aggregate difference between distant household quarter hour shares estimated by Dr. Gray and reported by Nielsen

Year	Canadian	CTV	Devotional	Program Suppliers	PTV	JSC
2010	-0.30%	-11.23%	0.80%	11.98%	-2.08%	0.83%
2011	1.64%	-0.76%	1.89%	8.03%	-11.04%	0.24%
2012	-5.62%	-1.68%	0.76%	9.75%	-2.87%	-0.33%
2013	3.03%	-4.07%	0.40%	-0.41%	-0.32%	1.37%

Notes: The figures represent the difference in the extrapolated share of household quarter hours. A negative number indicates that Dr. Gray's imputation reduced the share relative to the share implied by the viewing actually reported by Nielsen.

- (66) Thus, by relying on his regression estimates, Dr. Gray disproportionately increases distant viewing for some claimants while reducing the number of distant viewing households *below* what was actually measured for others. This is clear evidence that Dr. Gray's regression estimates, and the royalty shares derived from them, are biased and unreliable.

VI.F. Dr. Gray's 95% confidence intervals are invalid

- (67) In Table C-5 of his written testimony, Dr. Gray presents 95% confidence intervals associated with each of his distant viewership share estimates. These intervals are calculated incorrectly and give the mistaken impression that Dr. Gray's viewership shares are precisely estimated.
- (68) There are at least two fundamental problems with Dr. Gray's calculation of his confidence intervals.³⁰ First, Dr. Gray treats his data as if they were obtained from a simple random sample, thereby ignoring the additional sampling error inherent in his use of cluster sampling. Second, Dr. Gray treats the imputed values (zeros) in his regressions as if they are the true observed values.
- (69) As noted in Section IV.E, the statistical software package that Dr. Gray used in his analysis is equipped to handle complex sampling designs. This makes it easy to calculate a 95% confidence interval for each of Dr. Gray's royalty share estimates that properly accounts for Dr. Gray's use of cluster sampling. While not a complete accounting of all sources of uncertainty, this calculation enables us to assess how accounting for one element of uncertainty—Dr. Gray's sampling design—affects the width of his confidence intervals.

³⁰ To support the bootstrap resampling procedure that he uses to calculate his confidence intervals, Dr. Gray cites Efron and Tibshirani (1986). However, this article contains no mention of appropriate bootstrap procedures for handling imputed data or complex sampling designs. With clustered data, for example, modifications to the classical (i.i.d.) bootstrap are necessary as "[i]t is important that the resampling be done over entire clusters rather than over individual observations." (A. Colin Cameron and D. L. Miller, "A Practitioner's Guide to Cluster-Robust Inference," *Journal of Human Resources* 50, no. 2 (2015): 328.)

Figure 23: Confidence intervals for Dr. Gray's shares with his distant viewing estimates treated as true observations.

Year	Canadian	CTV	Devotional	Program Suppliers	PTV	JSC
2010	1.96% ± 1.68%	15.83% ± 3.32%	1.18% ± 0.71%	50.94% ± 7.45%	27.96% ± 8.65%	2.13% ± 1.10%
2011	3.93% ± 3.32%	12.06% ± 2.62%	2.44% ± 1.95%	49.92% ± 7.67%	29.09% ± 8.52%	2.57% ± 1.23%
2012	3.58% ± 2.61%	15.48% ± 5.10%	1.07% ± 1.13%	36.14% ± 8.68%	41.64% ± 10.49%	2.09% ± 1.02%
2013	5.31% ± 3.77%	10.64% ± 2.48%	1.09% ± 0.86%	44.69% ± 7.47%	33.47% ± 8.71%	4.80% ± 3.01%

- (70) Figure 23 shows that the MOEs that take account of Dr. Gray's sampling design are much larger than what he reports in his written testimony. Figure 24 expresses the same MOEs as confidence intervals, which can be compared directly to Dr. Gray's Table C-5. The very substantial differences resulting from properly accounting only for Dr. Gray's sampling design demonstrate the unreliability of Dr. Gray's reported confidence intervals and indicate more accurately the very substantial imprecision of his estimated viewing shares. Properly accounting for Dr. Gray's imputation of distant and local viewing records as well would only further broaden these confidence intervals.³¹

Figure 24. Confidence intervals for Dr. Gray's shares with his distant viewing estimates treated as true observations

Claimant	2010	2011	2012	2013
Canadian Claimants	0.28% - 3.64%	0.60% - 7.25%	0.97% - 6.20%	1.54% - 9.08%
Commercial Television	12.51% - 19.15%	9.44% - 14.68%	10.38% - 20.59%	8.16% - 13.12%
Devotionals	0.47% - 1.89%	0.49% - 4.39%	-0.06% - 2.20%	0.23% - 1.95%
Program Suppliers	43.49% - 58.39%	42.25% - 57.59%	27.46% - 44.82%	37.22% - 52.16%
Public Television	19.31% - 36.60%	20.57% - 37.61%	31.15% - 52.13%	24.76% - 42.18%
JSC	1.03% - 3.23%	1.34% - 3.79%	1.07% - 3.11%	1.79% - 7.81%

- (71) It is important to note that corrections to Dr. Gray's erroneous confidence intervals do not address the other substantial flaws in the design and execution of his study, discussed above, that result in biased and unreliable point estimates.

³¹ It is known that bootstrap procedures that incorrectly treat imputed values as the true observed values underestimate variance and produce invalid confidence intervals that are too narrow. *See, e.g., Jun Shao and Randy R. Sitter, "Bootstrap for Imputed Survey Data," Journal of the American Statistical Association* 91, no. 435 (1996): 1278.

VII. Program Suppliers Witness Howard Horowitz Miscategorizes a Number of Programs in His Cable Operator Survey Instrument

- (72) Counsel for CTV asked me to review the programs specified by Program Supplier witness Howard Horowitz³² in certain portions of his survey questionnaires and to evaluate whether they were identified in connection with the correct program category. I understand that, in the 2012 and 2013 versions of Mr. Horowitz's questionnaires that were administered to cable respondents who carried WGN as their only distant signal, the respondents were told, immediately after being read the definition of the category of "syndicated series" broadcast on WGN, that "examples include programs such as" (a) "30 Rock, Adelante Chicago, People to People, and MDA Show of Strength" in 2012 and (b) "30 Rock, Adelante Chicago, Everybody Loves Raymond, and People to People" in 2013.
- (73) Based on the programming information available to me, which I used to perform the categorizations described in my Written Direct Testimony in this proceeding, the two programs "Adelante Chicago" and "People to People" that aired on WGN in 2012 and 2013 are properly categorized as CTV programs, not Program Suppliers or syndicated programs. They aired only on WGN, and did not air on other stations.
- (74) I also understand that, in the 2011, 2012, and 2013 versions of Mr. Horowitz's questionnaires that were administered to cable respondents who carried WGN as their only distant signal, the respondents were asked to estimate the relative value, along with program categories, of "Other sports programming broadcast on WGN. Examples include Horse Racing." Mr. Horowitz considered responses regarding "Other Sports Programming" to be attributable to the Program Suppliers category, along with responses regarding "Movies" and "Syndicated Series."³³
- (75) Based on the programming information available to me, which I used to perform the categorizations described in my Corrected Written Direct Testimony in this proceeding, the only compensable Horse Racing program that aired on WGN in 2011, 2012, and 2013 was the annual Arlington Million race, which is properly categorized as a CTV program, not a Program Suppliers or syndicated program. The annual horse races aired only on WGN, and did not air on other stations.

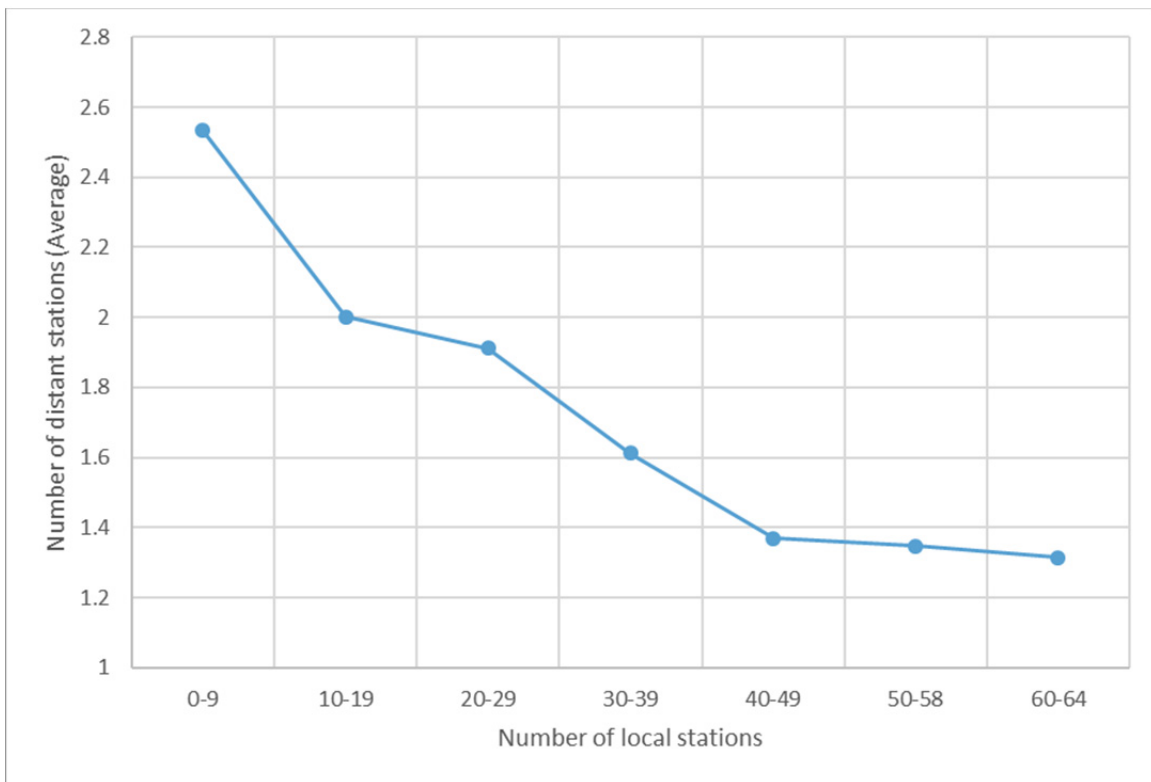
³² Corrected Direct Testimony of Howard Horowitz, filed April 25, 2017 ("Horowitz").

³³ See Horowitz, pp 15-16.

VIII. Data Analyses Regarding Distant Signal Carriage and Viewing

- (76) I was also asked by counsel for CTV to perform a number of data analyses in order to provide charts that could be referred to in the testimony of other CTV Rebuttal witnesses.
- (77) Figure 25 below, which is based on CDC's carriage data, plots the average number of distant signals by the number of local signals at the CSO-community level during 2010-2013.

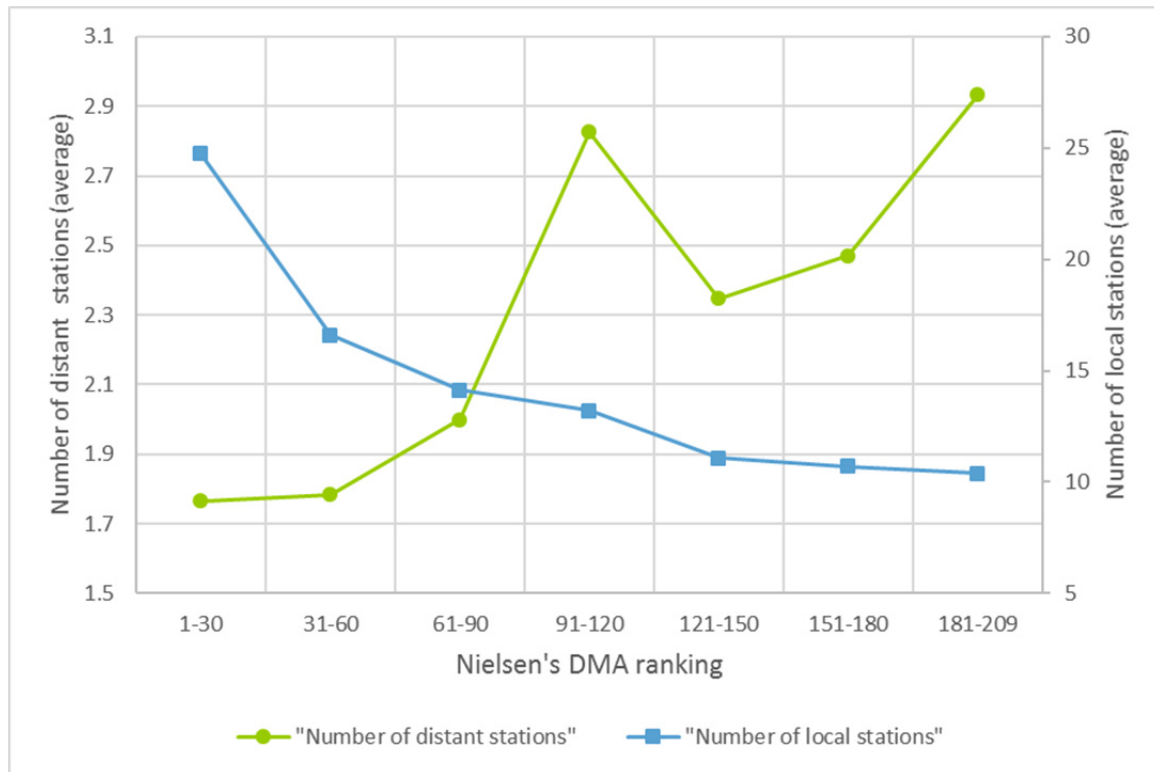
Figure 25: Relationship between the number of distant signals and local signals offered by a cable system in each cable community during 2010-2013



Source: CDC Data

- (78) Figure 26 below shows the average number of distant and local stations offered by CSOs within DMAs, grouped by DMA rankings.

Figure 26: Average offering of distant and local signals grouped by DMA ranking, 2010-2013



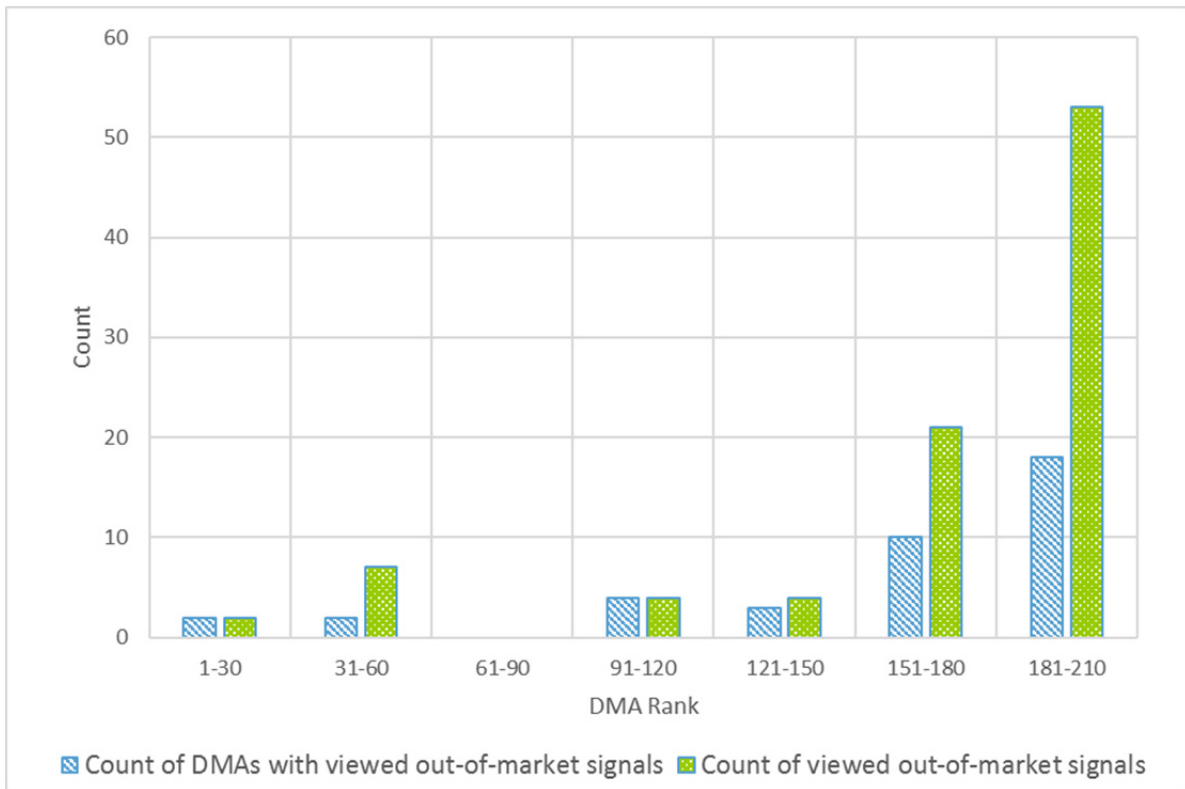
Source: CDC Data, Nielsen Local Television Market Universe Estimates 2009-2010, 2010-2011, 2011-2012, 2012-2013.

- (79) Figure 27 is an analysis of data presented in Appendix C to a report of the FCC regarding the availability of out-of-market signals.³⁴ Appendix C listed all DMAs in which Nielsen reported viewing to signals from other DMAs in November 2015, along with the stations that were viewed and their home markets.³⁵ Figure 27 shows the count of DMAs with at least one viewed out-of-market signal and the total count of viewed out-of-market signals within DMAs, grouped by DMA rank as of November 2015. The figure shows generally that the incidence of reported viewing, and the number of out-of-market signals that were reported as viewed, increased as the DMA size grew smaller (i.e., increased in rank).

³⁴ See *In re Designated Market Areas: Report to Congress Pursuant to Section 109 of the STELA Reauthorization Act of 2014*, MB Docket No. 15-43, June 3, 2016; FCC Report DA 16-613 (“FCC Report”), Appendix C: *Viewership of Out-of-Market Signals Based on Nielsen Market Data*, 195–249.

³⁵ Nielsen reported viewing for out-of-market signals only where they exceeded a minimum threshold “cume” rating of 9.5. See FCC Report, ¶ 58.

Figure 27: Out-of-market signals viewed and DMA, by DMA rank 2015



Source: FCC Report, Nielsen Local Television Market Universe Estimates effective September 26, 2015.

Appendix A. Duplicate Station Analysis

Figure 28. List of duplicated stations in Dr. Gray's sampling frame by year

Year	Station	In sample	Weight
2010	CBAT	No	13.48
2010	CBAT-DT	No	28.73
2010	CBET	No	2.24
2010	CBET-DT	No	5.27
2010	CBFT	No	2.24
2010	CBFT-DT	No	2.24
2010	CBMT	No	2.24
2010	CBMT-DT	Yes	1.00
2010	CBUT	Yes	1.00
2010	CBUT-DT	Yes	1.00
2010	CBWT	No	5.27
2010	CBWT-DT	Yes	5.27
2010	CFCF	No	28.73
2010	CFCF-DT	No	28.73
2010	CFTM	No	28.73
2010	CFTM-DT	No	28.73
2010	CFTO	No	2.24
2010	CFTO-DT	Yes	2.24
2010	CHLT	Yes	2.24
2010	CHLT-DT	No	13.48
2010	CICA	No	5.27
2010	CICA-DT	No	5.27
2010	CJOH	No	13.48
2010	CJOH-DT	No	13.48
2010	CKSH	No	2.24
2010	CKSH-DT	Yes	1.00
2010	CKWS	No	2.24
2010	CKWS-DT	Yes	2.24
2010	CKY	No	28.73
2010	CKY-DT	No	28.73
2010	KBYU	Yes	28.73
2010	KBYU-DT	No	13.48
2010	KCET	No	13.48
2010	KCET-DT	Yes	1.00
2010	KCET-HD	No	28.73
2010	KERA	No	28.73

Year	Station	In sample	Weight
2010	KERA-DT	Yes	2.24
2010	KETK	No	28.73
2010	KETK-DT	No	28.73
2010	KLRN-DT	Yes	2.24
2010	KLRN-HD	No	13.48
2010	KOCE-DT	No	5.27
2010	KOCE-HD	No	28.73
2010	KOMU-DT	No	28.73
2010	KOMU-HD	No	28.73
2010	KQEH	No	13.48
2010	KQEH-DT	No	2.24
2010	KVCR-DT	No	13.48
2010	KVCR-HD	No	13.48
2010	KWCM	No	28.73
2010	KWCM-DT	No	28.73
2010	KYTX	No	28.73
2010	KYTX-DT	No	28.73
2010	WADL	No	28.73
2010	WADL-DT	No	28.73
2010	WBND-LD	No	28.73
2010	WBND-LP	No	28.73
2010	WBQD-LD	No	13.48
2010	WBQD-LP	No	13.48
2010	WCIU	Yes	28.73
2010	WCIU-DT	No	28.73
2010	WCWW-LD	No	28.73
2010	WCWW-LP	No	28.73
2010	WDCQ	No	28.73
2010	WDCQ-DT	No	5.27
2010	WDIV	No	28.73
2010	WDIV-DT	Yes	2.24
2010	WETA	No	5.27
2010	WETA-DT	No	2.24
2010	WETA-HD	No	28.73
2010	WEYI	No	28.73
2010	WEYI-DT	No	5.27
2010	WFXT-DT	Yes	5.27
2010	WFXT-HD	No	5.27
2010	WGBH	No	28.73
2010	WGBH-DT	Yes	1.00
2010	WGBH-HD	No	28.73

Year	Station	In sample	Weight
2010	WGBX	No	28.73
2010	WGBX-DT	Yes	1.00
2010	WGN-DT	Yes	1.00
2010	WGN-HD	No	13.48
2010	WHUT	No	5.27
2010	WHUT-DT	No	5.27
2010	WHYY-DT	No	2.24
2010	WHYY-HD	No	28.73
2010	WIPB-DT	No	5.27
2010	WIPB-HD	No	13.48
2010	WJYS	No	28.73
2010	WJYS-DT	No	28.73
2010	WKBD	No	28.73
2010	WKBD-DT	Yes	13.48
2010	WLIW	No	2.24
2010	WLIW-DT	Yes	1.00
2010	WLVT-DT	No	2.24
2010	WLVT-HD	No	2.24
2010	WMEU-CA	No	2.24
2010	WMEU-CD	No	28.73
2010	WMPT	No	5.27
2010	WMPT-DT	No	5.27
2010	WMPT-HD	No	13.48
2010	WMYD	Yes	28.73
2010	WMYD-DT	No	28.73
2010	WMYS-LD	No	28.73
2010	WMYS-LP	No	28.73
2010	WNET	No	13.48
2010	WNET-DT	Yes	1.00
2010	WNET-HD	No	5.27
2010	WNJN	Yes	2.24
2010	WNJN-DT	No	2.24
2010	WNJN-HD	No	2.24
2010	WNJT-DT	Yes	1.00
2010	WNJT-HD	No	2.24
2010	WNYE	No	13.48
2010	WNYE-DT	No	5.27
2010	WPXD	Yes	28.73
2010	WPXD-DT	No	28.73
2010	WSBE	Yes	2.24
2010	WSBE-DT	Yes	1.00

Year	Station	In sample	Weight
2010	WSBE-HD	No	28.73
2010	WTCN-CA	No	28.73
2010	WTCN-LP	No	13.48
2010	WTTV-DT	No	13.48
2010	WTTV-HD	No	28.73
2010	WTTW	No	28.73
2010	WTTW-DT	Yes	1.00
2010	WTVS	No	28.73
2010	WTVS-DT	No	5.27
2010	WWJ	No	28.73
2010	WWJ-DT	Yes	28.73
2010	WXSP-CD	No	13.48
2010	WXSP-LP	No	5.27
2010	WXYZ	No	28.73
2010	WXYZ-DT	No	5.27
2011	CBET	No	1.93
2011	CBET-DT	No	1.93
2011	CBWT	No	7.04
2011	CBWT-DT	No	35.30
2011	KBYU	No	35.30
2011	KBYU-DT	No	35.30
2011	KLRN	No	15.48
2011	KLRN-DT	Yes	1.93
2011	KMIZ-DT	No	35.30
2011	KMIZ-HD	No	35.30
2011	KOMU-DT	No	35.30
2011	KOMU-HD	Yes	35.30
2011	KSHV-DT	No	35.30
2011	KSHV-HD	No	35.30
2011	KWCM	No	35.30
2011	KWCM-DT	No	35.30
2011	KWSD	Yes	35.30
2011	KWSD-DT	No	35.30
2011	WBND-LD	No	35.30
2011	WBND-LP	No	35.30
2011	WCNY-DT	No	7.04
2011	WCNY-HD	No	35.30
2011	WCWW-LD	No	35.30
2011	WCWW-LP	No	35.30
2011	WDNI-CD	No	35.30
2011	WDNI-LP	No	35.30

Year	Station	In sample	Weight
2011	WJWJ-DT	No	15.48
2011	WJWJ-HD	No	7.04
2011	WLIW-DT	Yes	1.00
2011	WLIW-HD	No	7.04
2011	WMYS-LD	No	35.30
2011	WMYS-LP	No	35.30
2011	WTTV-DT	Yes	15.48
2011	WTTV-HD	No	35.30
2011	WUNC-DT	Yes	1.93
2011	WUNC-HD	No	7.04
2012	CBUT	Yes	1.00
2012	CBUT-DT	Yes	7.80
2012	KBYU	No	39.95
2012	KBYU-DT	No	39.95
2012	KESQ	No	39.95
2012	KESQ-DT	No	39.95
2012	KPTM-DT	No	39.95
2012	KPTM-HD	No	39.95
2012	KWCM	No	39.95
2012	KWCM-DT	No	18.65
2012	KWTV-DT	No	7.80
2012	KWTV-HD	No	39.95
2012	WBND-LD	No	39.95
2012	WBND-LP	No	39.95
2012	WCWW-LD	No	39.95
2012	WCWW-LP	No	39.95
2012	WFXT-DT	No	7.80
2012	WFXT-HD	No	7.80
2012	WFYI-DT	Yes	7.80
2012	WFYI-HD	No	39.95
2012	WTTV-DT	No	18.65
2012	WTTV-HD	No	39.95
2012	WTXF-DT	Yes	1.00
2012	WTXF-HD	No	18.65
2013	CBET	Yes	1.00
2013	CBET-DT	No	2.18
2013	CBUT	Yes	1.00
2013	CBUT-DT	No	6.77
2013	CBWT	No	6.77
2013	CBWT-DT	No	41.68
2013	KEYC-DT	No	15.75

Year	Station	In sample	Weight
2013	KEYC-HD	No	41.68
2013	KPTM-DT	No	41.68
2013	KPTM-HD	No	41.68
2013	KRWG	No	41.68
2013	KRWG-DT	Yes	2.18
2013	KTCA-DT	No	2.18
2013	KTCA-HD	No	15.75
2013	KWCM	Yes	41.68
2013	KWCM-DT	No	15.75
2013	WFMJ-DT	No	41.68
2013	WFMJ-HD	No	41.68
2013	WFXT-DT	No	6.77
2013	WFXT-HD	No	6.77
2013	WFYI-DT	Yes	2.18
2013	WFYI-HD	No	41.68
2013	WGCL-DT	No	41.68
2013	WGCL-HD	No	41.68
2013	WGTE-DT	No	6.77
2013	WGTE-HD	No	41.68
2013	WKBN-DT	No	15.75
2013	WKBN-HD	No	41.68
2013	WLEX-DT	No	15.75
2013	WLEX-HD	No	41.68
2013	WNAB-DT	No	41.68
2013	WNAB-HD	No	41.68
2013	WNPT-DT	No	6.77
2013	WNPT-HD	No	15.75
2013	WPCH-DT	No	41.68
2013	WPCH-HD	No	41.68
2013	WPXD-DT	No	41.68
2013	WPXD-HD	No	41.68
2013	WQED-DT	Yes	2.18
2013	WQED-HD	No	41.68
2013	WTTW-DT	Yes	1.00
2013	WTTW-HD	No	41.68
2013	WTXF-DT	Yes	1.00
2013	WTXF-HD	No	41.68
2013	WUMN-CA	No	41.68
2013	WUMN-LP	No	41.68
2013	WUPX-DT	No	41.68
2013	WUPX-HD	No	41.68

Year	Station	In sample	Weight
2013	WVAH-DT	No	15.75
2013	WVAH-HD	No	41.68
2013	WWJ-DT	No	41.68
2013	WWJ-HD	No	41.68
2013	WYMT-DT	No	41.68
2013	WYMT-HD	No	41.68
2013	WYTV-DT	No	6.77
2013	WYTV-HD	No	41.68
2013	WZTV-DT	No	41.68
2013	WZTV-HD	No	41.68

DECLARATION OF CHRISTOPHER J. BENNETT

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 9/15/17



Christopher J. Bennett

**Before the
COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of

Distribution of Cable Royalty Funds

CONSOLIDATED PROCEEDING
No. 14-CRB-0010-CD (2010-13)

Rebuttal Testimony of Ceril Shagrin

September 15, 2017

STATEMENT OF CERIL SHAGRIN

1. My name is Ceril Shagrin. I have been asked by counsel for the Commercial Television Claimants to provide rebuttal testimony in this proceeding regarding the viewing study presented by Dr. Jeffrey Gray on behalf of the “Program Suppliers” claimants.

A. Background and Experience

2. I am currently a consultant on audience measurement issues, having retired earlier this year from my position as Executive Vice President for Corporate Audience Measurement Innovation and Analytics at Univision Communications Inc. I worked for Univision for just over 18 years. Univision is a Spanish-language multimedia company, which owns and operates numerous broadcast, cable and digital networks, television broadcast stations, radio stations, and programming and other content production and distribution operations. At Univision, I was responsible for defining the strategic direction for all audience, programming and marketing research for Univision's television networks and station groups.

3. Before joining Univision, I began my career at Nielsen Media Research. I ultimately served as Senior Vice President of Market Development at Nielsen, after working for nearly 27 years in all phases of Nielsen's audience measurement operations. I was actively involved in the development of Nielsen's data collection techniques, and was the primary participant in the development and rollout of the National People Meter Service. I pioneered the development of Nielsen's measurement of non-traditional media such as place-based media and out-of-home viewing. During my years at Nielsen, I was also the principal developer of the Nielsen Hispanic Service, which I managed for 10 years.

4. I have been an active member of the Media Rating Council, where I chaired the Council's Television Committee and served as a member of the Executive Committee. MRC was formed in the 1960's to improve the validity, reliability, and effectiveness of audience

measurement by ratings services, and pursues its mission through the adoption of minimum standards and conducting audits of compliance with those standards. MRC undertakes in-depth reviews of various audience measurement services offered by Nielsen and other measurement companies, and issues accreditations to services that meet MRC's standards.

5. I have also been an active member of the Interactive Advertising Bureau Research Committee and of the National Association of Broadcasters' Committee on Local Television Audience Measurement (COLTAM). COLTAM addresses important issues concerning the quality of the research products and services that are available to local television stations. The Committee engages the ratings services in a constant dialogue about the methods and practices used to produce their local audience estimates, and takes actions aimed at providing the local broadcast television industry with research of the highest possible quality.

6. I have also served during 2010-2013 as Chair of the Council on for Research Excellence, which was funded by Nielsen. I chaired CRE's Sample Quality Committee, and currently serve on CRE's Local Measurement Committee, Big Data Committee, and Data Quality Committee, among others. The mission of the CRE is to advance the knowledge and practice of methodological research on audience measurement through active collaboration between Nielsen and its clients.

7. I testified before two Congressional Committees. In 2005, I testified before the Senate Committee on Commerce, Science, and Transportation. The hearing explored whether proposed legislation could remedy concerns that Nielsen's new Local People Meter technology produced biased audience measurements that underrepresented minority populations. My testimony stressed the importance of MRC audits to ensure that Nielsen's Local People Meter

data was based on a proper sample. Additionally, I served on the committee which monitored the performance of Local People Meters and evaluated the improvements needed.

8. I also testified before the House Committee on Oversight and Government Reform in 2009 regarding the reliability of an electronic audience measurement tool for radio, the Arbitron Portable People Meter. I testified about problems with the sampling frame, sample size, and other sample techniques Arbitron (the principal source for radio audience data) used in its Portable People Meter that disproportionately affected minority owned-stations and minority listeners. Again, I testified about the importance of MRC audits, and I served on the committee that monitored and evaluated the Portable People Meter measurement improvements.

B. Dr. Gray's Study

9. I have reviewed the Amended and Corrected Testimony of Jeffrey S. Gray, Ph.D. submitted on April 3, 2017 ("Gray"), and the Testimony of Paul B. Lindstrom, which I understand was submitted on December 22, 2016 ("Lindstrom"). I have also reviewed the confidential Nielsen National Reference Supplements covering 2010-2013, which I am advised were produced in discovery.

10. As I understand it, Dr. Gray undertook to measure the relative amount of viewing to several different groups of programs in cable households, only where the programs were received on television stations that were distant signals (i.e., out-of-market signals) in the communities of the measured households. Gray ¶¶ 30, 38. I further understand that Dr. Gray extracted a sample of the distant signal stations in each year from 2010 through 2013 and that Mr. Lindstrom was provided with lists of those sample stations and data about their programs, along with lists of counties in which each of the sample stations was "local" (i.e., not a distant signal). Gray ¶ 30; Lindstrom p. 4. Nielsen then provided Dr. Gray with data that reported viewing in cable households, if any, for each quarter hour on each of the sample stations,

separated between viewing in cable households where the station was local and viewing in cable households where the station was distant. Lindstrom pp. 4-5; Gray ¶ 26.

11. I understand that all of the viewing data provided by Nielsen to Dr. Gray for the list of stations Dr. Gray specified¹ was collected in cable households included in Nielsen's National People Meter Sample and that Dr. Gray used unweighted household viewing counts rather than the weighted household viewing data normally used by Nielsen in its standard audience reports.

12. My testimony is not directed to whether viewing shares among distant signal programs is in general a proper method to determine relative market value of the distant signal program types. Instead, I address the questions of whether the particular viewing study presented by Dr. Gray is valid – meaning that it measures what it claims to measure – and whether it is reliable – meaning that if repeated it would produce consistent results.

C. Analysis and Opinion

13. It is my opinion, based on my review of the materials identified above and my understanding of the methodology used by Dr. Gray, that Dr. Gray's study does not provide a valid or reliable measure of the actual relative amounts of viewing to the identified groups of programs in distant cable households in 2010-2013.

(a) Nielsen Viewing Data

14. First, it is important to understand that although viewing data reported in a number of Nielsen's well-known audience measurement services are valid, reliable, and effective (and are therefore MRC-accredited), the custom analyses performed for use in Dr. Gray's study

¹ I understand that another CTV witness will demonstrate that of the slightly over 150 sample stations in each year, no data at all were provided for 8 stations in 2010, 5 stations in 2011, 6 stations in 2012, and 5 stations in 2013.

do not meet those standards. Nor are the viewing numbers used by Dr. Gray anything like the “Nielsen ratings” that are so widely used and accepted in the broadcast industry.

15. I am familiar, through my long experience at Nielsen and Univision and in industry research associations, with the television industry’s uses of audience measurement data for the sale of advertising time. Advertising sales, in either the national or local market, are based on ratings data in the relevant market. Dr. Gray’s viewing numbers do not represent ratings, and cannot be converted to ratings.² Moreover, given that the viewing numbers he collects are limited to viewing of programs on distant signals, which by definition are outside each station’s home market, the particular viewing he analyzes would not be the basis for advertising sales in the television marketplace. Typically, advertisers who buy advertising time in the local market would prefer local stations, which offer complete coverage of the market and higher ratings, and advertisers interested in national ad exposure would buy time on national networks or nationally syndicated programs. And even if Dr. Gray’s numbers could be expressed as ratings and were correct, which I do not believe they are, they are expressed in terms of household data, not the “persons” ratings data (e.g., “female age 18-49”) that are typically bought and sold in the television advertising marketplace.

16. When Dr. Gray states that “Nielsen is a well-regarded and highly-used source of audience measurement information in the television industry,” I believe he is referring to the MRC-accredited ratings services that Nielsen provides. But the custom analyses Nielsen performed here for Dr. Gray are not accredited. The methodology has not been audited to verify

² Ratings are measures of the percentage of people within a market who have access to a program who actually watched the show. So a “2” rating in the Washington market means that 2% of all the households with television sets in the Washington DMA watched the particular program. My understanding of Dr. Gray’s estimated viewing numbers is that they are based just on aggregated distant household viewing instances, as projected by Dr. Gray.

that the procedures were valid and correctly implemented, but a number of serious problems are evident from the limited material that has already been provided. For example, all Nielsen reports that are accredited are based on a representative sample, adjusted by weights to account for differences in cooperation rates, which is not the case for the data as used by Dr. Gray.

(b) Sample Problems

17. The sample is the foundation on which research is built. A representative sample is critical to valid, actionable estimates. To be useful, a sample must be drawn with the objective of representing the population that is the target of the research.

i. Meter Household Sample Problems

18. If a sample of cable television households were being designed to provide valid and reliable estimates of viewing to certain programs on distant (out of market) television signals, it would not be Nielsen's National People Meter ("NPM") Sample.

19. The NPM Sample is carefully designed and maintained to measure ratings of nationally distributed programs among all US television households ("TVHHs"). Designing a proper study of relative viewing to distant signal programs, which are not distributed evenly throughout the country, would require a different sample selection and different weighting in order to provide reliable audience estimates.

20. A key difference is that distant signals are more prevalent in smaller markets than in the nation's largest markets. Exhibit A, which was prepared by CTV witness Dr. Chris Bennett, shows the relative numbers of distant signals and local stations carried in cable communities in 2010-2013, grouped by the size of the DMAs in which the cable communities are located. Exhibit B, also prepared by Dr. Bennett, shows that the cable communities with the largest number of local signals (generally the largest DMAs) generally have lower numbers of

distant signals. Based on these analyses, it is clear that more distant signals were carried to cable subscribers in smaller markets than in larger markets in 2010-2013.

21. The FCC actually did a study of out of market viewing, as part of a Report it issued in June 2016 in response to a Congressional mandate to provide information on the availability of out-of-market television stations. Exhibit D is a copy of the Report. Among the data analyses the FCC performed was an analysis of Nielsen local market reports (i.e., reports of viewing within each DMA) to find reported viewing to distant stations (i.e., stations from other DMAs). The analysis is explained in Paragraphs 32 and 58-61 of the Report. Exhibit E is a copy of Appendix C to the Report, in which the FCC lists all of the instances in which viewing from out of market signals was reported by Nielsen.³ As the FCC notes, more distant stations were typically viewed in “smaller DMAs with fewer local, in-market signals.”⁴ And Exhibit C, prepared by Dr. Bennett based on Exhibit E, shows the number of DMAs and out of market signals that had any reportable viewing at all (in the November 2015 local market reports), arranged in descending order of DMA size. Again, it is clear that out of market signal viewing is more prevalent in the very smallest DMAs. A sample properly designed to measure distant signal viewing would necessarily take that factor into account.

22. The NPM sample, by contrast, is designed to measure viewing to nationally distributed programming across all US TVHHs. At one end of the spectrum, the sample contains

³ As the FCC explains in its Report, it analyzed data only for the month of November 2015. It also explains that Nielsen’s local market reports include distant signals only if they meet a 9.5 “cume” threshold (i.e., 9.5% of the market’s television households watched at least one quarter-hour of any programming on the station during an average week). The FCC notes that this may underrepresent the total number of distant signals being viewed in various markets, but Appendix C reports all distant signal viewing that met Nielsen’s own established thresholds for reportability.

⁴ Exhibit D at para. 60.

substantially more households from the largest DMAs (such as New York, Los Angeles, and Chicago), and at the other end, far fewer households – and in some cases no NPM households at all – are recruited in the smallest DMAs. Given the higher incidence of distant signal carriage and distant signal viewing in the smaller DMAs, a study that uses the NPM sample would not be expected to measure distant signal viewing accurately, or even to pick up a significant portion of distant signal viewing. Measuring only distant signal viewing is in one way like measuring viewing of Spanish-language programming. In order to produce a sample that will provide a valid measure of either, there is a need to focus on the characteristics of the populations of interest and the distribution of the programming of interest in the sample design.

23. Along the same lines, the NPM sample households in any DMA are not sufficient to provide valid ratings data for their local market. For measuring local market viewing, which requires more extensive coverage of station schedules as well as many programs that are not nationally distributed, Nielsen chooses a larger sample of households, for both Local People Meter markets and for Diary markets. Indeed, the FCC's Study used data from these larger-sample local market reports to find and identify distant signal viewing in 2015.

24. The NPM sample, which was well designed for a specific and different purpose, simply can't do the job of validly measuring distant signal viewing.

ii. Station Sample Problems

25. Even if using the NPM Sample were appropriate for measuring distant signal viewing, Dr. Gray used viewing data only for a sample of the distant signals. As with Nielsen's selection of a sample of households, the validity and reliability of data reported by Dr. Gray for a sample of stations would depend on whether the sample was properly drawn, whether it proportionately represents the populations of interest (in this case all distant signal programming), and if necessary whether (as discussed in the next section) the reported data are

weighted properly to account for any over- or under-representation. I understand that CTV witness Dr. Bennett will present an analysis of whether Dr. Gray's station sample was properly selected and weighted.

(c) Weighting Problems

26. Weighting is absolutely critical to the validity and reliability of the NTI reports based on the National People Meter Sample households. Nielsen applies these weights to counteract sampling error, by comparing the in-tab households (i.e., those providing usable information that can be included in the particular viewing report) with the Universe Estimate and weighting the in-tab households to make them match, and therefore proportionately represent, the universe being measured.

27. Weighting factors applied by Nielsen to its NPM household data may number 20 or more per household, and include market/sample size, cable status, age, race, education, household size, languages spoken, presence of children, and more. Nielsen's weighting of each NPM Sample household may be changed on a daily basis, depending on whether the households being measured each day match the characteristics of the population they are being used to represent. Without this complex and careful weighting, the reported viewing data for the sample cannot be considered as accurately representing the viewing of the sampled population.

28. Dr. Gray's aggregation of raw household viewing observations, without including their Nielsen weights, would not produce a valid measure of national viewing, even if the NPM Sample adequately represented the relevant universe of distant signal viewing. I understand that Dr. Gray weighted the household viewing data based on the chances of selection of each station in his sample, but that does not address or cure the problem of ignoring the Nielsen household weights.

D. Conclusion

29. Based on the fundamental methodological flaws in his study, and based on my experience in audience measurement, it is my opinion that the analysis conducted by Dr. Gray cannot be relied upon as a valid or reliable measure of actual distant signal viewing in 2010-2013.

DECLARATION OF CERIL SHAGRIN

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 9/15/17


Ceril Shagrin

EXHIBIT A

Average offering of distant and local signals grouped by DMA ranking, 2010-2013

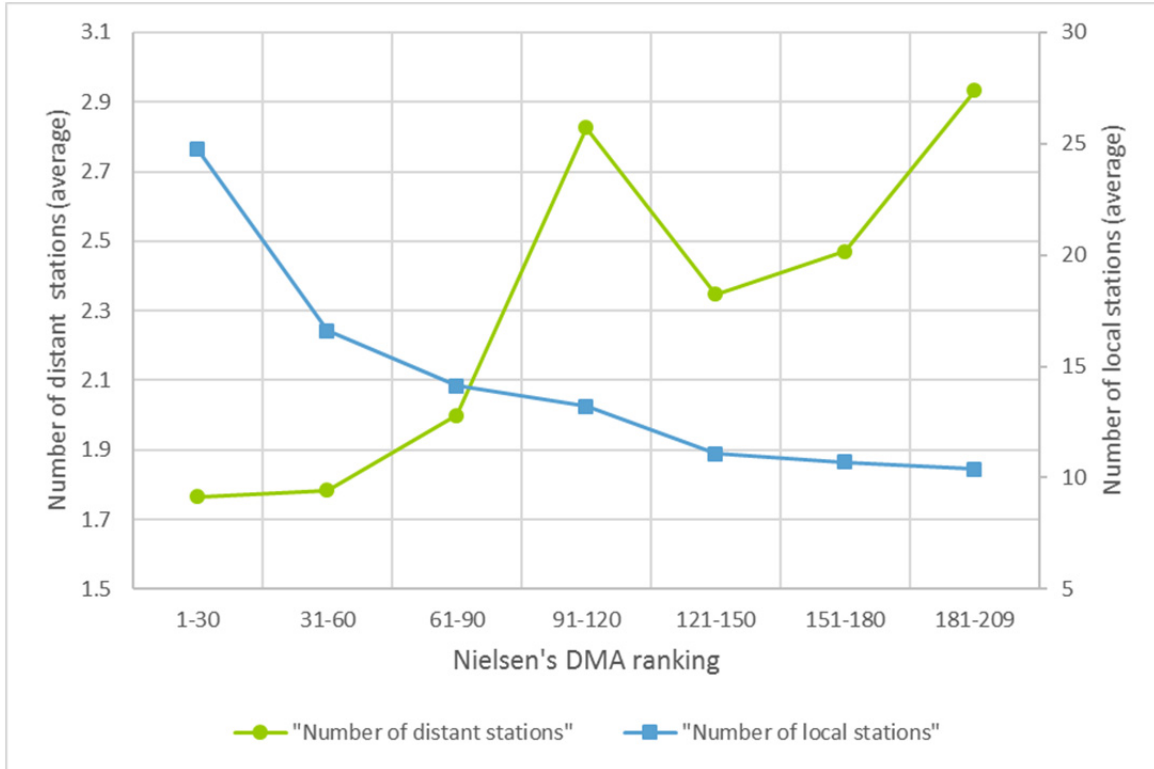


EXHIBIT B

Relationship between the number of distant signals and local signals offered by a cable system in a community during 2010-2013

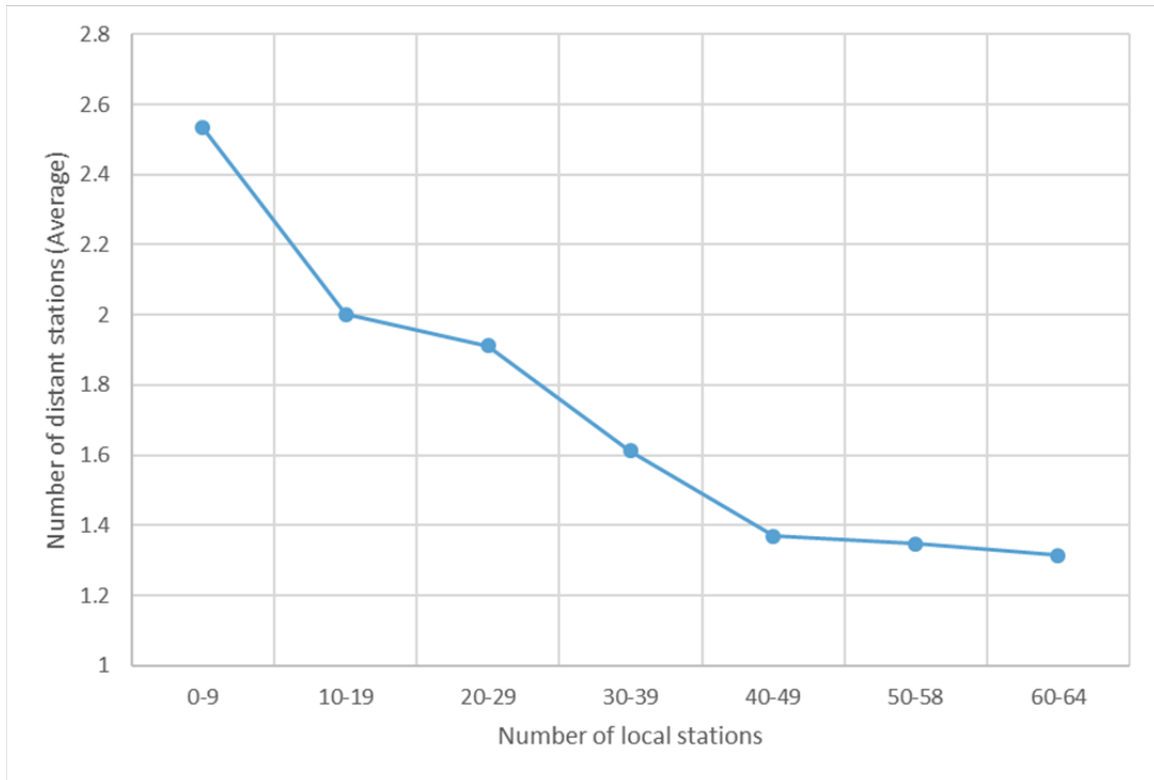


EXHIBIT C

Out-of-market signals viewed and DMA, by DMA rank 2015

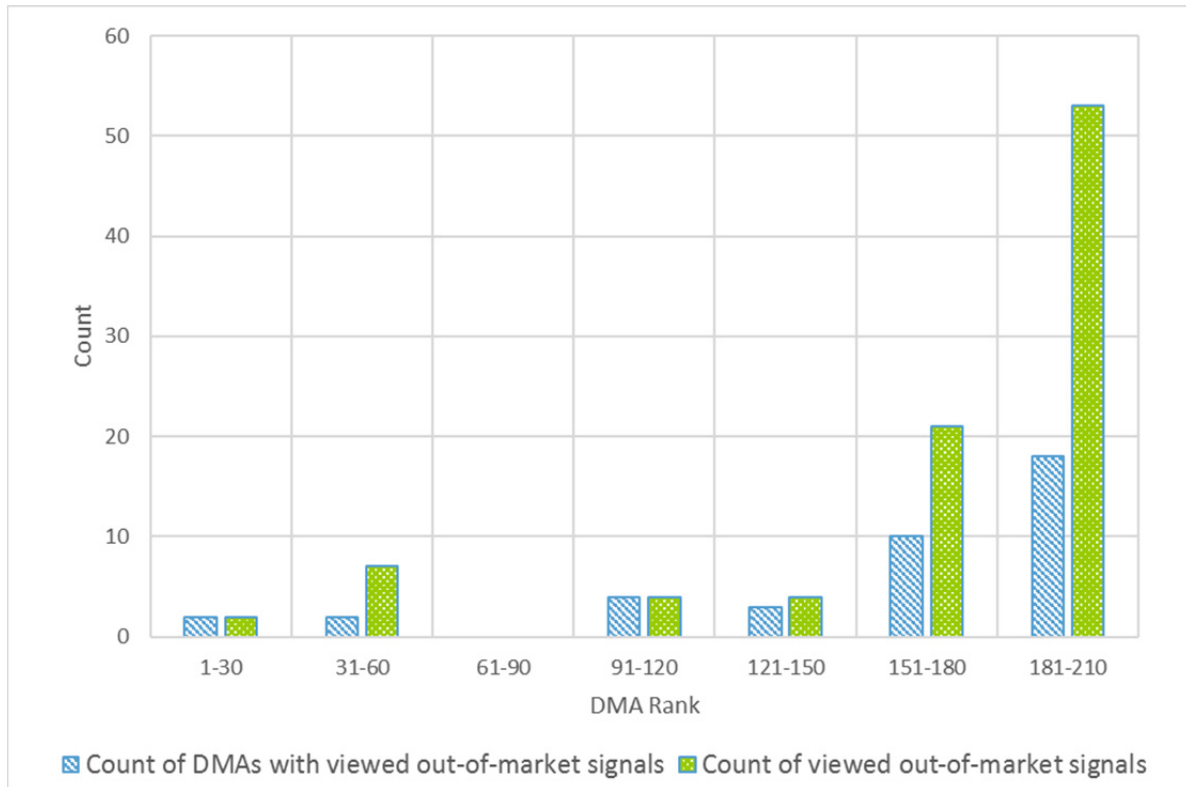


EXHIBIT D

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Designated Market Areas:)	MB Docket No. 15-43
Report to Congress)	
Pursuant to Section 109 of the)	
STELA Reauthorization Act of 2014)	
)	
)	

REPORT

Adopted: June 3, 2016

Released: June 3, 2016

By the Chief, Media Bureau:

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I. INTRODUCTION

1. The STELA Reauthorization Act of 2014 (STELAR) amends the Communications Act of 1934, as amended, (Communications Act) and Title 17 of the United States Code to extend expiring provisions relating to the retransmission of signals of television broadcast stations.¹ The STELAR also

¹ STELA Reauthorization Act of 2014, Pub. L. No. 113-200, § 109, 128 Stat. 2059, 2065 (2014) (STELAR).

amends several Federal Communications Commission (Commission) regulations relating to the carriage of television broadcast signals by cable systems and satellite video providers.²

2. In addition, Section 109 of the STELAR requires the Commission to submit a report on designated market areas (DMAs)³ and considerations for fostering increased localism to the appropriate congressional committees not later than 18 months after the date of enactment (i.e., June 4, 2016).⁴ Specifically, Section 109(a)(1) states that the report should contain an analysis of the following:

(A) the extent to which consumers in each local market have access to broadcast programming from television broadcast stations located outside their local market, including through carriage by cable operators and satellite carriers of signals that are significantly viewed (within the meaning of section 340 of the Communications Act of 1934 (47 U.S.C. 340)); and

(B) whether there are technologically and economically feasible alternatives to the use of designated market areas to define markets that would provide consumers with more programming options and the potential impact such alternatives could have on localism and on broadcast television locally, regionally, and nationally;⁵

3. Section 109(a)(2) requires further that the report contain “recommendations on how to foster increased localism in counties served by out-of-State designated market areas.”⁶ In making such recommendations, Section 109(b) of the STELAR instructs that the Commission consider the following factors:

(1) the impact that designated market areas that cross State lines have on access to local programming;

(2) the impact that designated market areas have on local programming in rural areas; and

(3) the state of local programming in States served exclusively by out-of-State designated market areas.⁷

² Statement by the Press Secretary on H.J. Res. 129, H.R. 4067, H.R. 5441, H.R. 5728, Dec. 4, 2014, 2014 WL 6845401.

³ A DMA is a geographic area defined by The Nielsen Company as a group of counties that make up a particular television market. These counties comprise the major viewing audience for the television stations located in their particular metropolitan area. For the most part, the metropolitan areas correspond to the standard metropolitan statistical areas defined by the Federal Government Office of Management and Budget. The geographic areas do not overlap, and most counties in the United States belong to only one DMA (in rare instances a county is divided by Nielsen and assigned to different DMAs). DMAs are used in the evaluation of audience data as well as in the planning and buying of television advertising. In addition, the DMA is used to define local markets for broadcast station carriage rights under must carry and retransmission consent. DMAs also have a limited role in determining broadcast television ownership limits as part of the Commission’s media ownership rules. In the satellite context, the statute requires that DMAs be used to define local markets. *See, e.g.*, 47 U.S.C. § 338 (signal carriage rights) and 17 U.S.C. § 122 (copyright).

⁴ The date of enactment was December 4, 2014. Thus, the deadline for the Section 109 Report under the STELAR is June 4, 2016.

⁵ STELAR, § 109(a)(1)(A), (B), 128 Stat. 2065; *see* Report from the Senate Committee on Commerce, Science, and Transportation accompanying S. 2799 (the Satellite Television Access and Viewer Rights Act (STAVRA)), 113th Cong., S. Rep. No. 113-322, at 15 (2014) (*Senate Commerce Committee Report*).

⁶ STELAR, § 109(a)(2), 128 Stat. 2065; *see Senate Commerce Committee Report* at 15.

⁷ STELAR, § 109(b)(1)-(3), 128 Stat. 2065; *see Senate Commerce Committee Report* at 15.

4. The Commission's Media Bureau (Bureau) issued a public notice (*STELAR Report PN*) seeking data, information, and comment for use in preparation of the required report.⁸ Specifically, the Commission sought comment on the appropriate methodologies and data sources, as well as the submission of data and information, to analyze the extent to which consumers have access to programming from broadcast stations located outside their local markets.⁹ The *STELAR Report PN* sought comment on technologically and economically feasible alternatives to DMAs that would provide more programming options and the potential impact of such alternatives on localism and on broadcast television locally, regionally, and nationally.¹⁰ Further, the *STELAR Report PN* sought recommendations on how to foster localism in counties served by out-of-State DMAs and the impact of such recommendations as required under Section 109(b).¹¹ In response to the *STELAR Report PN*, the Bureau received comments from broadcasters, cable and satellite video providers, and a county political party, as well as from individual consumers. Commenters generally support retaining the current DMA-based market determination system but disagree on the method for ensuring access to in-state programming for all counties.¹²

5. In this Report, the Media Bureau analyzes the issues raised in Section 109 of the STELAR concerning access to out-of-market stations and methods to foster increased localism in counties served by out-of-state designated market areas. Specifically, the Report: (1) examines the extent to which consumers in local markets have access to broadcast programming from television stations located outside of their local market; (2) assesses whether there are any technologically or economically feasible alternatives to the use of DMAs to define markets that would provide consumers with greater programming options and the potential impact of alternatives on localism and on broadcast television locally, regionally, and nationally; and (3) includes a discussion of recommendations that might foster increased localism in counties served by out-of-state DMAs. In order to provide an appropriate foundation for the discussion of DMAs and access to local broadcast stations, we first describe below the most current statutory and regulatory provisions governing broadcast television and carriage of broadcast television stations.

II. BACKGROUND

6. Under the Communications Act and the Commission's rules, the Commission uses DMAs, as determined by the Nielsen Company (Nielsen), to define local markets with respect to the carriage of broadcast signals by cable and satellite operators.¹³ Nielsen divides the United States into 210

⁸ *Media Bureau Seeks Comment for Report Required by the Stela Reauthorization Act Of 2014*, MB Docket No. 15-43, Public Notice, 30 FCC Rcd 1904 (MB 2015) (*STELAR Report PN*).

⁹ *STELAR Report PN*, 30 FCC Rcd at 1905.

¹⁰ *Id.*

¹¹ *Id.*

¹² *See infra* paras. 89-94.

¹³ *See* 47 U.S.C. § 534(h)(1)(C); 47 CFR § 76.55(e)(2) (defining a television broadcast station's local market for purposes of cable carriage). *See* 47 U.S.C. § 338(k)(4) (using definition in 17 U.S.C. §§ 122(j)(2)); 47 CFR § 76.66(e) (defining a television broadcast station's local market for purposes of satellite carriage). The Communications Act originally defined local markets for cable carriage using the Arbitron areas of dominant influence (ADI) methodology. Due to Arbitron discontinuing its television research operation, Section 614 of the Communications Act was amended by Section 301 of the Telecommunications Act of 1996 to provide that, for purposes of applying the cable mandatory carriage provisions, "a broadcast station's market shall be determined by the Commission by regulation or order using, where available, commercial publications which delineate television markets based on viewing patterns." 47 U.S.C. § 534(h)(1)(C)(i); *see also Definition of Markets for Purposes of the Cable Television Mandatory Television Broadcast Signal Carriage Rules*, CS Docket No. 95-178, Report and Order (continued....)

DMA. DMAs describe each television market in terms of a group of counties and are defined by Nielsen based on measured viewing patterns.¹⁴ The counties included in a DMA generally are clustered geographically around the major metropolitan area or areas in that DMA, where the majority of the market's television stations usually are located. DMAs are in part primarily designed to facilitate commercial purposes — such as program acquisition, the sale of advertising, and network compensation — and thus primarily represent market areas where broadcasters acquire programming and sell advertising.¹⁵ Because DMAs are based on viewing patterns as measured by Nielsen irrespective of state boundaries, a large number of DMAs cross state lines and include counties from multiple states.¹⁶

7. Multichannel video programming distributors (MVPDs) generally carry the television stations assigned by Nielsen to their local markets.¹⁷ As a result, some residents of certain counties located within multiple-state DMAs may not always receive the programming of broadcast television stations located in the state in which they live, either by means of over the air reception or MVPD service. To the extent that such county residents cannot receive broadcast station signals that originate within their state, some have referred to such counties informally as “orphan counties.”

8. In part because of the concern that consumers residing in such counties may not have access to in-state broadcast television programming, Congress directed the Commission in 2010, as part of the Satellite Television Extension and Localism Act (STELA), to analyze how many consumers have access to in-state local broadcast television stations.¹⁸ At that time, Congress also directed the Commission to determine if alternatives to the use of DMAs to define local markets existed that would provide more consumers with in-state broadcast programming.¹⁹ In response to Congress's direction in STELA, on August 26, 2011, the Bureau issued the *In-State Programming Report*, which found that the overwhelming majority of consumers have access to in-state programming and that significant disadvantages existed for alternatives to the DMA market determination system.²⁰

(Continued from previous page) _____

and Further Notice of Proposed Rulemaking, 11 FCC Rcd 6201, 6202, para. 1 (1996) (*Market Definition Order*) (defining local markets using Nielsen DMAs after Arbitron ceased publication of television data). The Commission concluded that Nielsen's DMA system was the appropriate commercial publication to replace Arbitron. *Market Definition Order*, 11 FCC Rcd at 6202, para. 1. Congress subsequently used DMAs to define local markets in the satellite carriage context. 47 U.S.C. § 338(k)(4); 17 U.S.C. § 122(j)(2).

¹⁴ Nielsen delineates television markets by assigning each U.S. county (except for certain counties in Alaska) to one market based on measured viewing patterns both off-air and by MVPD distribution. See *Retransmission Consent and Exclusivity Rules: Report to Congress Pursuant to Section 208 of the Satellite Home Viewer Extension and Reauthorization Act of 2004*, 2005 WL 2206070, at para. 53 n.177 (Sept. 8, 2005) (*SHVERA Report*); see also Nielsen Media Research, Glossary of Media Terms, at <http://www.nielsenmedia.com/glossary/>.

¹⁵ *Market Definition Order*, 11 FCC Rcd at 6209, 6220, paras. 21, 39.

¹⁶ *Broadcast Localism*, MB Docket No. 04-233, Report on Broadcast Localism and Notice of Proposed Rulemaking, 23 FCC Rcd 1324, 1345-46, para. 49 (2008).

¹⁷ By statute, cable operators are required to carry the signals of all qualified television stations in their local market. See 47 U.S.C. § 534. DBS providers are required to carry the signals of all qualified television stations in a local market if they choose to carry the signal of at least one local television station in that market. See 47 U.S.C. § 338; 17 U.S.C. § 122.

¹⁸ *In-State Broadcast Programming: Report to Congress Pursuant to Section 304 of the Satellite Television Extension and Localism Act of 2010*, MB Docket No. 10-238, Report, 26 FCC Rcd 11919, 11920, para. 2 (MB 2011) (*In-State Programming Report*).

¹⁹ *Id.*

²⁰ *Id.* at 11929-30, paras. 17-18.

9. Now, through Section 109 of the STELAR, Congress has directed the Commission to analyze the issue of access to broadcast television stations further, specifically through the lens of whether consumers have access to out-of-market stations, regardless of whether those stations are located in the same state or a different state as the viewer.²¹ In addition, Section 109 directs the Commission to examine further whether there are any technologically and economically feasible alternatives to the Nielsen DMA market system, and to also discuss any recommendations that might foster increased localism in counties that are included in out-of-state DMAs.

10. Our assessment of the issues regarding the ability of consumers to receive out-of-market broadcast stations begins with an updated presentation of the regulations and statutes that govern broadcast television and the carriage of broadcast television stations by MVPDs. These statutory and regulatory provisions help to establish why certain stations are available only in certain locations. Also, some commenters in this proceeding propose potential modifications to various aspects of these provisions. We thus set forth these provisions to facilitate a comprehensive examination of the matters at hand. Specifically, we briefly describe below the copyright, retransmission consent, and mandatory carriage statutory provisions, as well as Commission rules regarding cable carriage of broadcast television station signals and how cable carriage differs in several respects from Direct Broadcast Satellite (DBS) carriage. We note the changes to the Commission's rules that have been implemented pursuant to the STELAR, including the recent extension of the Commission's market modification rules to allow the Commission to modify markets for purposes of satellite carriage. We also describe the Commission's pending proceeding regarding the rules governing program exclusivity.

11. *Localism in Broadcast Television.* Localism has been a cornerstone of the Commission's broadcast regulation for decades.²² The concept derives from Title III of the Communications Act, which generally instructs the Commission to regulate broadcasting as the public interest, convenience, and necessity dictate. Section 307(b) of the Communications Act explicitly requires the Commission to "make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same."²³ In carrying out the mandate of Section 307(b), the Commission has long recognized that "every community of appreciable size has a presumptive need for its own transmission service."²⁴ The Supreme Court has stated that "[f]airness to communities [in distributing radio service] is furthered by a recognition of local needs for a community radio mouthpiece."²⁵ Broadcasters thus function as temporary trustees of the public's airwaves and must use the medium to serve the public interest.²⁶ The Commission has consistently interpreted this responsibility to mean that licensees must air programming that is responsive to the needs and interests of their communities of license.²⁷

²¹ In contrast to Section 304 of STELA, which directed the Commission to analyze consumer access to in-state and out-of-state local broadcast television station signals, Section 109(a)(1)(A) of the STELAR seeks an analysis of consumer access to out-of-market stations. STELAR, § 109(a)(1)(A), 128 Stat. 2065.

²² See, e.g., *Deregulation of Radio*, 84 FCC 2d 968, 994, para. 58 (1981) ("The concept of localism was part and parcel of broadcast regulation virtually from its inception.").

²³ 47 U.S.C. § 307(b).

²⁴ *Pacific Broadcasting of Missouri LLC*, 18 FCC Rcd 2291, 2293 (2003) (quoting *Public Service Broadcasting of West Jordan, Inc.*, 97 F.C.C. 2d 960, 962 (Rev. Bd. 1984)).

²⁵ *FCC v. Allentown Broadcasting Corp.*, 349 U.S. 358, 362 (1955).

²⁶ See, e.g., *Broadcast Localism*, MB Docket No. 04-233, Notice of Inquiry, 19 FCC Rcd 12425, 12425, para. 1 (2004) (*Broadcast Localism NOI*).

²⁷ See *id.* at 12425, para. 1. A broadcast station's community of license is typically a much smaller geographic area than a DMA.

12. Once awarded a license, a broadcast television station must place a specified signal contour over its community of license to ensure that local residents receive service.²⁸ A full power television station must maintain its main studio in or near its community of license to facilitate interaction between the station and the members of the local community served by the station.²⁹ For similar reasons, a station “must equip the main studio with production and transmission facilities that meet the applicable standards, maintain continuous program transmission capability, and maintain a meaningful management and staff presence.”³⁰ A station must also post to a central, FCC-hosted online database certain public file documents,³¹ including “a list of programs that have provided the station’s most significant treatment of community issues during the preceding three month period.”³² Lastly, as a general matter, a broadcast station seeking Commission authority to renew, assign, or transfer its license must give public notice to its community to ensure that members of the community have an opportunity to file a petition to deny if the members object to the station’s application for renewal or assignment or transfer.³³ Taken together, these rules, policies, and procedures reflect the Commission’s goal of establishing and maintaining a system of local broadcasting that is responsive to the unique interests and needs of individual communities.³⁴

13. *Cable Carriage of Local Broadcast Stations.* Prior to 1992, Congress did not require cable operators to seek the permission of a broadcaster before carrying its signal or to compensate the broadcaster for the value of its signal.³⁵ Congress established in the 1992 Cable Act a regime for carriage of broadcast television stations on cable systems.³⁶ The 1992 Cable Act permitted broadcasters to seek

²⁸ See 47 CFR § 73.685(a).

²⁹ See *id.* § 73.1125.

³⁰ *Amendment of Section 73.1125 and 73.1130 of the Commission’s Rules, the Main Studio and Program Origination Rules for Radio and Television Broadcast Stations*, Memorandum Opinion and Order, 3 F.C.C.R. 5024, at para. 24 (1988), *erratum issued*, 3 FCC Rcd 5717 (1988) (correcting language in n.29).

³¹ *Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations*, Second Report and Order, 27 FCC Rcd 4535 (2012); 47 CFR § 73.3526(b)(2). See also *Expansion of Online Public File Obligations to Cable and Satellite TV Operators and Broadcast and Satellite Radio Licensees*, MB Docket No. 14-127, Report and Order, 31 FCC Rcd 526 (2016).

³² 47 CFR § 73.3526(e)(11)(i) (commercial TV issues/programs list). These lists must be retained until final action has been taken on the station’s next renewal application. *Id.* The purpose of this requirement is to provide both the public and the Commission with information needed to monitor a licensee’s performance in meeting its public interest obligation of providing programming that is responsive to its community. See *Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations*, 15 FCC Rcd 19816, 19821, para. 13 (2000).

³³ See 47 CFR § 73.3580.

³⁴ See *Broadcast Localism NOI*, 19 FCC Rcd at 12427, para. 4. Localism also forms one of the Commission’s policy goals for its media ownership rules. See *2014 Quadrennial Regulatory Review – Review of the Commission’s Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, MB Docket No. 14-50 et al., Further Notice of Proposed Rulemaking and Report and Order, 29 FCC Rcd 4371, 4377, para. 14 (2014).

³⁵ Congress found that this created a “distortion in the video marketplace which threatens the future of over the air broadcasting.” S. Rep. No. 92, 102d Cong., 1st Sess. 1 (1991), at 35 (Senate Report).

³⁶ Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat. 1460 (1992) (1992 Cable Act or 1992 Act); H. Rep. No. 628, 102d Cong., 2d Sess. (1992) (House Report); Senate Report. See also 47 U.S.C. § 534 (carriage of commercial television stations); 47 U.S.C. § 535 (carriage of noncommercial television stations); 47 U.S.C. § 325 (retransmission consent).

compensation from cable operators and other MVPDs for carriage of their signals through a system commonly referred to as retransmission consent, as a way of giving broadcasters control over the use of their station signals.³⁷ The 1992 Cable Act also established mandatory carriage rights for local broadcast television stations commonly referred to as must-carry requirements. Congress recognized the importance of local television broadcast stations as providers of local news and public affairs programming in adopting the mandatory carriage provisions.³⁸ Congress observed that broadcast television stations rely on advertising dollars to provide free over the air local service and that competition from cable television in attracting advertisers posed a threat to the economic viability of television broadcast stations. By mandating cable carriage of broadcast stations, Congress sought to ensure the continued economic viability of free local broadcast television.³⁹

14. The process whereby cable operators carry local broadcast stations in local television markets is governed by the Communications Act and the Commission's rules.⁴⁰ Commercial television stations may elect cable carriage under either must-carry or retransmission consent requirements within their local television markets, based on Nielsen DMAs.⁴¹ Under the must-carry regime, a local commercial broadcast television station generally can require a cable system to carry its signal if it serves the same market as the cable system, delivers a good quality signal to the cable system's headend, and indemnifies the cable system against copyright infringement, among other statutory requirements.⁴² Under the retransmission consent regime, the cable operator and broadcaster negotiate the terms of a retransmission consent agreement, which may include monetary or other compensation for carriage of the broadcast signal. Both sides are required to negotiate in good faith.⁴³ Cable operators also may negotiate for retransmission consent with any other broadcast television station they seek to carry regardless of the station's television market.⁴⁴ In this manner, cable operators may carry the signals of television stations

³⁷ Congress noted that some broadcasters might find that carriage itself was sufficient compensation for the use of their signal while other broadcasters might seek monetary compensation and still others might negotiate for in-kind consideration such as joint marketing efforts, the opportunity to provide news inserts on cable channels, or the right to program an additional channel on a cable system. Senate Report at 36. Congress emphasized that it intended "to establish a marketplace for the disposition of the rights to retransmit broadcast signals" but did not intend "to dictate the outcome of the ensuing marketplace negotiations." *Id.* On September 2, 2015, the Commission issued a Notice of Proposed Rulemaking implementing Section 103(c) of the STELAR. This rulemaking seeks comment on whether and how to update the totality of the circumstances test for good faith negotiation of retransmission consent and whether certain practices should be considered evidence of bad faith under the totality of the circumstances test, or, alternatively, *per se* violations of the requirement to negotiate in good faith. *See Implementation of Section 103(c) of the STELA Reauthorization Act of 2014, Totality of the Circumstances Test*, Notice of Proposed Rulemaking, 30 FCC Rcd 10327, 10332, 10344-45, paras. 6, 20 (2015).

³⁸ House Committee on Energy and Commerce, H.R. Conf. Rep. No. 102-862, 102d Cong., 2d Sess. (1992), reprinted at 138 Cong. Rec. H8308, at 2 (Sept. 14, 1992).

³⁹ *Id.* at 3.

⁴⁰ Federal law and Commission regulations require cable operators that are subject to rate regulation to provide subscribers with a basic service tier and to carry local broadcast stations on that tier. 47 U.S.C. § 543(b)(7); *see also* 47 CFR § 76.901.

⁴¹ *See* 47 CFR § 76.64.

⁴² *See id.* §§ 76.55(c)(2)-(3), 76.56(b)(5).

⁴³ *Id.* § 76.65.

⁴⁴ 47 U.S.C. § 325; *see also* 47 CFR § 76.64 (retransmission consent). However, such carriage arrangements may be, and often are, limited by other contractual restrictions, such as network affiliation agreements. *See supra* paras. 24, 109.

that originate in a market other than the market in which the cable system operates. Such stations are typically referred to in this Report as either “distant signals” or “out-of-market stations.”

15. Qualified local noncommercial educational (NCE) broadcast television stations have must-carry rights under the 1992 Act, but do not have statutory retransmission consent rights.⁴⁵ Among other requirements, the NCE broadcast television station must serve the same market as the cable system on which it seeks carriage, deliver a good quality signal, and not air duplicative programming to be deemed a “qualified” NCE station.⁴⁶ Under specifically enumerated criteria, qualified low power broadcast television (LPTV) stations, including Class A stations, also may be eligible for mandatory carriage on cable systems.⁴⁷

16. Commission rules, pursuant to Section 614(h)(1)(C) of the 1992 Cable Act, also permit a modification of the local television market to include additional communities or to exclude certain communities on request from a broadcast station or a cable system.⁴⁸ This process is known as market modification and can be used to avoid rigid adherence to Nielsen’s DMA assignments by adding or removing communities from a DMA-based local television market for the purposes of broadcast station carriage rights.⁴⁹ In determining whether to grant a request to modify a local market, pursuant to the current statute as amended by the STELAR, the Commission must give particular attention to localism through its consideration of several statutory factors, including (1) whether the station, or other stations located in the same area, (a) have been historically carried on the cable system or systems within such community; and (b) have been historically carried on the satellite carrier or carriers serving such community; (2) whether the television station provides coverage or other local service to such community; (3) whether modifying the local market of the television station would promote consumers’ access to television broadcast station signals that originate in their state of residence; (4) whether any

⁴⁵ 47 U.S.C. § 325(b)(2)(A).

⁴⁶ Pursuant to the Commission’s rules, a qualified NCE station is one that is: (1) licensed to a community whose reference point, as defined in § 76.53, is within 80.45Km (or 50 miles) of the principal headend (as defined in § 76.5) of the cable system; and (2) whose Grade B service contour encompasses the principal headend (as defined in § 76.5) of the cable system. Further, a cable operator is not required to carry the signal of a qualified local NCE station if the station’s signal would be considered a distant signal for copyright purposes unless the station agrees to indemnify the cable operator for any increased copyright liability resulting from carriage of its station signal. 47 CFR § 76.55(b). We note that this rule has not been amended since the digital transition. However, following the digital transition, a station’s service area is no longer defined by reference to its Grade B contour. Rather, a digital station’s service area is defined as the area within its noise-limited contour where its signal strength is predicted to exceed the noise-limited service level. *See id.* § 73.622(e); *see also Report To Congress: The Satellite Home Viewer Extension and Reauthorization Act of 2004 Study of Digital Television Field Strength Standards and Testing Procedures*, ET Docket No. 05-182, 20 FCC Rcd 19504, 19507, 19554, paras. 3, 111 (2005); *Implementation of the Satellite Home Viewer Extension and Reauthorization Act of 2004, Implementation of Section 340 of the Communications Act*, MB Docket No. 05-49, Report and Order, 20 FCC Rcd 17278, 17292, para. 31 (2005).

⁴⁷ 47 CFR §§ 76.55(d), 76.56(b)(4). LPTV stations may be entitled to mandatory cable carriage only in limited circumstances. Both the Communications Act and the Commission’s rules mandate that only a minimum number of qualified low power stations must be carried by cable systems, *see* 47 U.S.C. § 534(c)(1); 47 CFR § 76.56(b)(3), and, in order to qualify, such stations must meet several criteria. *See* 47 U.S.C. § 534(h)(2)(A) – (F); 47 CFR § 76.55(d)(1) – (6). Class A stations have the same limited must carry rights as LPTV stations; in other words, they are “low power stations” for mandatory carriage purposes. *See Establishment of a Class A Television Service*, MM Docket No. 00-10, Memorandum Opinion and Order on Reconsideration, 16 FCC Rcd 8244, 8259-6, paras. 40, 42. LPTV stations are not entitled to mandatory satellite carriage. *See* 47 U.S.C. § 338(a)(3).

⁴⁸ 47 CFR § 76.59; *see also* 47 U.S.C. § 534(h)(1)(C); STELAR § 102, 128 Stat. at 2060-62 (extending market modification provisions to satellite MVPDs).

⁴⁹ 47 CFR § 76.59.

other television station that is eligible to be carried by a satellite carrier in such community in fulfillment of the requirements of this section provides news coverage of issues of concern to such community or provides carriage or coverage of sporting and other events of interest to the community; and (5) evidence of viewing patterns in households that subscribe and do not subscribe to the services offered by multichannel video programming distributors within the areas served by such multichannel video programming distributors in such community.⁵⁰ In the STELAR, Congress added the additional factor (numbered as factor 3 above), which requires consideration of access to television stations that are located in the same state as the community considered for modification.⁵¹ On September 2, 2015, as part of its implementation of Section 102 of the STELAR, the Commission stated that the new factor favors any market modification that would promote consumers' access to an in-state station.⁵² In addition, Section 102 extended the market modification provisions to apply to satellite MVPDs, as discussed further below.⁵³

17. Certain stations are considered "significantly viewed" under the Commission's rules based on over the air viewing. For broadcast signal carriage purposes, these stations are treated as local stations.⁵⁴ In addition to stations historically considered significantly viewed in a community, the Commission grants significantly viewed status to commercial stations based on petitions from broadcasters, cable operators, or DBS operators that show that a station satisfies viewing criteria on a community-wide or county-wide basis.⁵⁵ These petitions must follow statistical requirements in Commission rules that were later codified in the U.S. Copyright Act with respect to satellite carriers.⁵⁶ Carriage of out-of-market significantly viewed signals also requires retransmission consent.⁵⁷

⁵⁰ 47 U.S.C. § 534(h)(1)(C)(ii)(I)-(V). The Commission must also consider other relevant information to develop a result that is designed to "better effectuate the purposes" of the law. *See Definition of Markets for Purposes of the Cable Television Broadcast Signal Carriage Rules*, CS Docket No. 95-178, Order on Reconsideration and Second Report and Order, 14 FCC Rcd 8366, 8389, para. 53 (1999) (*Cable Market Modification Second Report and Order*).

⁵¹ STELAR, § 102(b)(1)(C), 128 Stat. 2061. 47 U.S.C. § 534(h)(1)(C)(ii)(III).

⁵² *Amendment to the Commission's Rules Concerning Market Modification*, MB Docket No. 15-71, Report and Order, 30 FCC Rcd 10406, 10409, para. 4 (2016) (*Satellite Market Modification Order*).

⁵³ *See* STELAR § 102, 128 Stat. at 2060-62; 47 U.S.C. § 338(l)(2)(B)(i)-(v).

⁵⁴ *See SHVERA Report* at paras. 15-16; *see also Implementation of Section 203 of the Satellite Television Extension and Localism Act of 2010*, MB Docket No. 10-148, Report and Order and Order on Reconsideration, 25 FCC Rcd 16383, 16389-90, paras. 7-8 (2010) (*STELA Significantly Viewed Report and Order*).

⁵⁵ 47 CFR § 76.54(b), (d); 47 CFR § 76.5(i)(1)-(2). All stations that have been declared significantly viewed are included in the publicly available significantly viewed list. The determination of whether or not a station is considered significantly viewed in a community depends on several statutory factors, and is not dependent upon whether the station is in the same market or state as the county in which it is considered significantly viewed. The current significantly viewed list is available on the Media Bureau's website at <http://www.fcc.gov/mb/>. The vast majority of stations identified on the significantly viewed list are already considered local in their markets, as the counties in which they are considered significantly viewed are contained in the station's DMA.

⁵⁶ *See* STELA § 103.

⁵⁷ 47 U.S.C. § 340(d)(2). The STELAR contains a provision that prohibits a television broadcast station from limiting the ability of an MVPD to carry into its local market television signals that are deemed "significantly viewed" or that otherwise are permitted to be carried by the MVPD unless such stations are directly or indirectly under common *de jure* control permitted by the Commission. STELAR, § 103(b), 128 Stat. 2062; *Implementation of Sections 101, 103 and 105 of the STELA Reauthorization Act Of 2014*, MB Docket 15-37, Order, 30 FCC Rcd 2380, 2382, para. 5 (2015).

18. Copyright law also forms a significant portion of the regulatory framework governing broadcast signal carriage. The Copyright Act grants cable systems a statutory or “compulsory” license for the retransmission of all local broadcast signals and distant signals that the Commission has permitted them to carry.⁵⁸ Unlicensed retransmission of the copyrighted material in a broadcast signal constitutes copyright infringement pursuant to amendments of the Copyright Act.⁵⁹ The compulsory licensing regime established by the 1976 amendments to the Copyright Act also took into consideration the Commission’s rules that: (1) defined the term “local broadcast station;” (2) limited the number of distant signals that a cable operator could import (the distant signal rule);⁶⁰ (3) permitted a local broadcaster to require a cable operator to delete duplicative programming for which the station had obtained exclusive rights (the network non-duplication and syndicated exclusivity rules); and (4) required the carriage of certain signals.⁶¹

19. *Satellite Carriage of Local Broadcast Stations.* Congress enacted the first satellite compulsory copyright law in 1988 as the Satellite Home Viewer Act (SHVA),⁶² which granted direct-to-home (DTH) satellite providers a compulsory copyright license to retransmit television signals of distant network stations⁶³ to “unserved households” and superstations (non-network stations) to any household.⁶⁴

⁵⁸ 17 U.S.C. § 111(c). Under the compulsory license, cable systems are not required to obtain the consent of the copyright owners of copyrighted material contained in the broadcast signal being retransmitted or negotiate license fees for the use of such copyrighted material, but, instead, must pay government-established fees for the right to retransmit copyrighted material contained in broadcast programming. 17 U.S.C. § 111(d). The 1976 amendments established that fees payable to copyright owners for compulsory licenses would be based on a percentage of each cable system’s gross revenues and would be adjusted periodically by the newly formed Copyright Royalty Tribunal. *Id.*

⁵⁹ See 17 U.S.C. § 111(b).

⁶⁰ 47 CFR §§ 76.59(b); 76.61(b); 17 U.S.C. § 111.

⁶¹ 47 CFR §§ 76.92 (cable network non-duplication), 76.101 (cable syndicated program exclusivity); 17 U.S.C. § 111(d) (limitations on exclusive rights; secondary transmissions of broadcast programming by cable).

⁶² Satellite Home Viewer Act of 1988, Pub. L. No. 100-667, 102 Stat 3935, Title II (1988) (SHVA); 17 U.S.C. § 119.

⁶³ Network stations are generally television broadcast stations owned or operated by, or affiliated with, one or more of the television networks. See 47 U.S.C. § 339(d)(3) (stating that a “network station” for purposes of this section is defined by the Copyright Act); 17 U.S.C. § 119(d)(2) (“The term ‘network station’ means -- (A) a television broadcast station, including any translator station or terrestrial satellite stations that rebroadcasts all or substantially all of the programming broadcast by a network station, that is owned or operated by, or affiliated with, one or more of the television networks in the United States which offer an interconnected program service on a regular basis for 15 or more hours per week to at least 25 of its affiliated television licensees in 10 or more States; or (B) a noncommercial educational broadcast station...”).

⁶⁴ The Copyright Act defined an unserved household as a “household that cannot receive, through use of a conventional stationary, outdoor rooftop receiving antenna, an over the air signal of a primary network television station affiliated with that network of Grade B intensity as defined by the Federal Communications Commission under Section 73.683(a) of Title 47 of the Code of Federal Regulations, as in effect on January 1, 1999.” 17 U.S.C. § 119(d)(10)(A). An unserved household can also be one that is subject to one of four statutory waivers or exemptions. 17 U.S.C. § 119(d)(10)(B)-(E); see also 47 U.S.C. § 325(b)(2)(C) (providing an exemption from retransmission consent requirements for satellite carriage of network stations to unserved households), as amended by Section 101 of the STELAR (extending exemption through December 31, 2019). Section 119(d)(9) of the Copyright Act defines “superstation” as a television station, other than a network station, licensed by the Federal Communications Commission, that is secondarily transmitted by a satellite carrier.” 17 U.S.C. § 119(d)(9).

This license generally applies to the signals of superstations and network stations that satellite carriers retransmit to the public for private home viewing.⁶⁵

20. Satellite carriers have a statutory copyright license under the 1999 Satellite Home Viewer Improvement Act (SHVIA) for carriage of stations to any subscriber within a station's local market, without distinction between network and non-network signals or served or unserved households.⁶⁶ Prior to such carriage, DBS operators must obtain consent from broadcast licensees to retransmit the stations' signals to subscriber households.⁶⁷ In contrast to cable operators, DBS operators are not required to carry local broadcast television stations. However, if a DBS operator chooses to carry a local station in a particular DMA in reliance on the statutory copyright license, it generally must carry any qualified local station in the same DMA that makes a timely election for retransmission consent or mandatory carriage.⁶⁸ Just as with cable carriage of broadcast signals, if a broadcaster elects retransmission consent, the satellite carrier and broadcaster negotiate the terms of a retransmission consent agreement, with each side required to negotiate in good faith. In contrast to cable "must carry" requirements, satellite carriers are not required to carry television stations if they do not rely on the statutory license but instead privately negotiate for a copyright license.⁶⁹ Satellite carriers are not required to carry a station if its programming is duplicative of the programming of another station carried by the DBS operator in the same DMA unless the duplicating stations are licensed to communities in different states.⁷⁰ Satellite carriers also are not required to carry a station if the station fails to provide a good quality signal to the DBS operator's local receive facility.⁷¹

21. Unlike cable operators, the "distant" (*i.e.*, out-of-market) signals that DBS operators can provide to their subscribers are limited. Under the Communications Act and copyright laws, a satellite carrier may provide distant broadcast television station signals to its subscribers only if local stations are unavailable to them as part of a local-into-local satellite package or over the air.⁷² For example, in "short

⁶⁵ 17 U.S.C. § 119.

⁶⁶ Satellite Home Viewer Improvement Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (1999) (SHVIA). *See also* 17 U.S.C. § 122(j) (the term "local market" means the DMA in which the station is located).

⁶⁷ 47 U.S.C. § 325. This carriage arrangement is commonly referred to as "local-into-local" carriage.

⁶⁸ *Id.* § 338. This requirement is commonly referred to as "carry one, carry all."

⁶⁹ *Id.* § 338. *See also Implementation of the Satellite Home Viewer Extension and Reauthorization Act of 2004 to Amend Section 338 of the Communications Act*, MB Docket No. 05-181, 20 FCC Rcd 14242 (2005) (Section 338(a)(4) supersedes carry-one, carry-all by mandating analog and digital carriage in Alaska and Hawaii); Satellite Home Viewer Extension and Reauthorization Act of 2004, Pub. L. No. 108-477, § 210, 118 Stat. 2809 (2004) (SHVERA) (creating § 338(a)(4) (mandatory carriage in Alaska and Hawaii)).

⁷⁰ 47 U.S.C. § 338(c)(1).

⁷¹ *Id.* § 338.

⁷² *See* 17 U.S.C. § 119; 47 U.S.C. § 339. The Communications Act and copyright laws set out two key restrictions on a satellite subscriber's eligibility to receive "distant" (out-of-market) signals. First, subscribers are generally eligible to receive a distant station from a satellite carrier only if the subscriber is "unserved" over the air by a local station of the same network. Second, even if "unserved," a subscriber is not eligible to receive a distant station from a satellite carrier if the carrier is making "available" to such subscriber a local station of the same network. *See* 47 U.S.C. § 339(a)(2); 17 U.S.C. § 119(a)(3). This second restriction on eligibility is commonly referred to as the "no distant where local" rule. A satellite carrier makes "available" a local signal to a subscriber or person if the satellite carrier offers that local signal to other subscribers who reside in the same zip code as that subscriber or person. 47 U.S.C. § 339(a)(2)(H). *See also* 17 U.S.C. § 119(a)(3)(F). The Copyright Act defines an "unserved household," with respect to a particular television network, as "a household that cannot receive, through the use of an antenna, an over the air signal containing the primary stream, or, on or after the qualifying date, the multicast stream, originating (continued....)"

markets” — television markets where one of the four major television networks is not offered on the primary stream of a local broadcast station — satellite carriers are permitted to deliver a distant station affiliated with that missing network to subscribers in that market.⁷³ The mandatory carriage of broadcast signals from both distant and local broadcast stations is subject to royalty fees at a rate set forth by statute and collected by the U.S. Copyright Office.⁷⁴

22. The Satellite Home Viewer Extension and Reauthorization Act of 2004 (SHVERA)⁷⁵ expanded the statutory copyright license to allow satellite carriers to carry significantly viewed stations,⁷⁶ which are treated as local stations with respect to a particular satellite community⁷⁷ in another market, thus allowing them to be carried by the satellite carrier in that community.⁷⁸ Satellite carriers are not required to carry out-of-market significantly viewed stations. If they do carry such significantly viewed stations, retransmission consent is required.⁷⁹ STELA reauthorized the statutory copyright license for satellite carriage of significantly viewed stations and moved that license from the distant signal statutory copyright license provisions in Section 119(a)(3) of the Copyright Act to the local signal statutory copyright license provisions in Section 122(a)(2) of the Copyright Act.⁸⁰ Thus, the Copyright Act defines

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in that household’s local market and affiliated with that network— (i) if the signal originates as an analog signal, [of] Grade B intensity as defined by the Federal Communications Commission in section 73.683(a) of title 47, Code of Federal Regulations, as in effect on January 1, 1999; or (ii) if the signal originates as a digital signal, [of] intensity defined in the values for the digital television noise-limited service contour....” 17 U.S.C. § 119(d)(10)(A). An unserved household can also be one that is subject to one of four statutory waivers or exemptions. *See id.* § 119(d)(10)(B)-(E).

⁷³ *See* 47 U.S.C. § 339(a)(2)(C); 17 U.S.C. § 119(d)(10); *Satellite Market Modification Order*, 30 FCC Rcd at 10443, n.256.

⁷⁴ Satellite carriers pay royalties on a per subscriber, per signal, per month basis; and must report periodically to the Copyright Office on which broadcast signals they have retransmitted.

⁷⁵ Section 202 of SHVERA created Section 340 of the Communications Act, 47 U.S.C. § 340, which authorized satellite carriage of significantly viewed stations. *See also Implementation of the Satellite Home Viewer Extension and Reauthorization Act of 2004, Implementation of Section 340 of the Communications Act*, MB Docket No. 05-49, Report and Order, 20 FCC Rcd 17278 (2005) (*SHVERA Significantly Viewed Report and Order*).

⁷⁶ Section 102 of SHVERA extended the statutory copyright license contained in 17 U.S.C. § 119(a) to apply “to the secondary transmission of the primary transmission of a network station or a superstation to a subscriber who resides outside the station’s local market ... but within a community in which the signal has been determined by the Federal Communications Commission, to be significantly viewed in such community, pursuant to the rules, regulations and authorizations of the Federal Communications Commission in effect on April 15, 1976, applicable to determining with respect to a cable system whether signals are significantly viewed in a community.”

⁷⁷ *See* 47 CFR §§ 76.5(dd) (defining cable “community unit”), 76.5(gg) (defining a “satellite community”).

⁷⁸ For copyright purposes, significantly viewed status means that cable and satellite providers may carry the out-of-market but significantly viewed station with the reduced copyright payment obligations applicable to local (in-market) stations. *See* 17 U.S.C. §§ 111(a), (c), (d), and (f), as amended by STELA § 104 (relating to cable statutory copyright license) and 122(a)(2), as amended by STELA § 103 (relating to satellite statutory copyright license).

⁷⁹ *See* 47 U.S.C. § 340(d). Pursuant to SHVERA, DBS operators were granted the right to retransmit out-of-market significantly viewed commercial broadcast stations to subscribers in the community in which the station is deemed significantly viewed, provided the local station affiliated with the same network as the significantly viewed station is offered to subscribers. SHVERA permits a satellite carrier to privately negotiate with a local network station to obtain a waiver of the requirement that the local station be offered. 47 U.S.C. § 340(b)(4). SHVERA provides that, as in the cable context, satellite carriers pay reduced copyright fees for retransmission of significantly viewed stations. 17 U.S.C. § 119(a).

⁸⁰ *See* STELA § 103.

significantly viewed signals as another type of local signal, rather than as an exception to distant signals.⁸¹ Section 122(a)(2) explicitly limits significantly viewed status to those signals that have been determined by the Commission to be significantly viewed pursuant to the rules in effect as of April 15, 1976.⁸² Satellite carriers are required to provide written notice to local stations before they begin carriage of significantly viewed stations.⁸³

23. Section 102 of the STELAR amended the Communications Act and the Copyright Act to give the Commission authority to modify a commercial television broadcast station's local television market for purposes of satellite carriage rights.⁸⁴ The Commission previously had such authority to modify markets only in the cable carriage context.⁸⁵ On September 2, 2015, the Commission implemented Section 102 of the STELAR by revising the current cable market modification rule, Section 76.59, to apply also to satellite carriage, while adding provisions to the rules to address the unique nature of satellite television service.⁸⁶ As discussed above, the market modification rules permit the modification of a local television market to include additional communities or to exclude certain communities pursuant to appropriate request.⁸⁷ Such market modifications enable avoidance of rigid adherence to Nielsen's DMA assignments by adding or removing communities from a DMA-based local television market for the purposes of broadcast station carriage rights.⁸⁸ In addition, the Commission amended the existing rules to reflect the STELAR provisions that apply uniquely to satellite carriers, such as an exception if the resulting modified carriage is "not technically and economically feasible."⁸⁹ The Commission also concluded that the purpose of the STELAR in promoting consumer access to in-state programming would be better facilitated by also permitting a county governmental entity (such as a county board, council, commission, or other equivalent subdivision) to file a satellite market modification petition.⁹⁰ The new rules became effective on February 25, 2016.⁹¹

⁸¹ *STELA Significantly Viewed Report and Order*, 25 FCC Rcd 16383, 16387, para. 4 & n.23. In the *STELA Significantly Viewed Report and Order*, the Commission revised its satellite television significantly viewed rules to facilitate satellite carriage of significantly viewed stations and thereby provide satellite subscribers with greater choice of programming and to improve parity and competition between satellite and cable carriage of broadcast stations. *Id.* at 16411, para. 55.

⁸² 17 U.S.C. § 122(a).

⁸³ 47 CFR § 76.54(e). This notice requirement does not apply to cable system carriage of significantly viewed stations.

⁸⁴ STELAR §§ 102, 204, 128 Stat. at 2060-62, 2067. Like the existing cable provision, the STELAR provision pertains only to "commercial" stations, thus excluding noncommercial stations from seeking market modification. *See* 47 U.S.C. § 338(l)(1).

⁸⁵ *See* 47 U.S.C. § 534(h)(1)(C). *See also* 47 CFR § 76.59.

⁸⁶ *Amendment to the Commission's Rules Concerning Market Modification; Implementation of Section 102 of the STELA Reauthorization Act of 2014*; MB Docket No. 15-71, Report and Order, 30 FCC Rcd 10406 (2015) (*Satellite Market Modification Order*).

⁸⁷ 47 CFR § 76.59; *see* 47 U.S.C. §§ 338(l) and 534(h)(1)(C).

⁸⁸ 47 CFR § 76.59.

⁸⁹ *Satellite Market Modification Order*, 30 FCC Rcd at 10409, para. 4.

⁹⁰ *Id.*

⁹¹ *Notice of Effective Date of STELAR Market Modification Rules Requiring OMB Approval Media Bureau Now Accepting Satellite Market Modification Petitions*, MB Docket No. 15-71, Public Notice, DA 16-203 (MB Feb. 25, 2016).

24. *Program Exclusivity.* A broadcaster may carry network and syndicated programming on its local television station or stations only with the permission of the networks or syndicators that own or hold the rights to that programming. Broadcast stations often negotiate to be the exclusive distributor of specific programming in a local market. The Commission's program exclusivity rules, along with provisions in network and syndication programming contracts, protect the rights of stations to be the exclusive distributor of programming in a local market.⁹² The network non-duplication rules protect a local commercial or noncommercial broadcast television station's right to be the exclusive distributor of network programming within a specified zone and require programming subject to the rules to be blacked out when carried on another station's signal imported by an MVPD into the local station's zone of protection.⁹³ Similarly, the syndicated exclusivity rules protect the exclusive distribution rights of a commercial broadcast television station or a distributor of syndicated programming within a 35-mile geographic zone surrounding a television station's city of license.⁹⁴ On March 31, 2014, the Commission released a Further Notice of Proposed Rulemaking, seeking comment on whether to modify or eliminate the network non-duplication and syndicated exclusivity rules.⁹⁵

25. On September 30, 2014, the Commission adopted a Report and Order that repealed the sports blackout rules, which prohibited cable and satellite operators from airing any sports event that had been blacked out on a local broadcast station.⁹⁶ Finding that the sports industry had evolved dramatically over the last forty years, the Commission concluded that the sports blackout rules were no longer necessary to ensure that sports programming remains widely available to television viewers.⁹⁷ The Commission also concluded that the elimination of the sports blackout rules would not adversely impact localism in broadcasting.⁹⁸ The Commission noted that, in the absence of sports blackouts, local stations in markets otherwise prone to blackouts may carry more games and earn more advertising revenues, which would benefit localism.⁹⁹

III. SECTION 109(a)(1)(A): ANALYSIS OF FINDINGS

26. Section 109(a)(1)(A) of the STELAR requires the Commission to analyze "the extent to which consumers in each local market have access to broadcast programming from television broadcast stations located outside their local markets, including through carriage by cable operators and satellite carriers of signals that are significantly viewed (within the meaning of Section 340 of the

⁹² The exclusivity rules may be invoked by stations that elect retransmission consent in their local markets, even if they are not actually carried by the MVPD, to prevent an MVPD from carrying programming of a distant station that duplicates local broadcast station programming. For example, an in-market station that fails to reach agreement for retransmission consent and subsequently refuses to permit an MVPD to carry its signal can still invoke the network non-duplication and syndicated exclusivity rules to require the blackout, in market, of programming that would otherwise be provided by the in-market station.

⁹³ See 47 CFR §§ 76.92, 76.93, 76.122.

⁹⁴ See *id.* §§ 76.101, 76.103, 76.123.

⁹⁵ *Amendment of the Commission's Rules Related to Retransmission Consent*, MB Docket No. 10-71, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 3351, 3375, para. 40 (2014). The proceeding remains pending.

⁹⁶ *Sports Blackout Rules*, MB Docket No. 12-3, Report and Order, 29 FCC Rcd 12053 (2014). The elimination of the sports blackout rules became effective as of November 24, 2014. See *Sports Blackout Rules*, 79 Fed. Reg. 63,547, 63,547 (Oct. 24, 2014).

⁹⁷ *Sports Blackout Rules*, 29 FCC Rcd at 12054, 12056, 12060-61, paras. 1, 6, 12.

⁹⁸ *Id.* at 12084, para. 40.

⁹⁹ *Id.*

Communications Act of 1934 (47 U.S.C. 340)).”¹⁰⁰ We interpret Section 109(a)(1)(A) to require the Commission to identify in each DMA the out-of-market broadcast stations available over the air or carried by DBS, cable, and telephone MVPDs, and the number of consumers that have access to such out-of-market broadcast stations through any of these distribution means.¹⁰¹ By “out-of-market” stations, we mean broadcast stations that are licensed to a community located in a market other than that in which the consumer resides. As noted, out-of-market stations are also referred to as “distant” or “imported” signals, as they are distant to the consumer’s own local market and thus would need to be imported into the market if they were to be carried by an MVPD.

27. As noted above, the Commission previously reported to Congress in 2011 regarding the extent to which consumers in a state receive broadcast signals from stations licensed to the same state in which they reside or to a different state.¹⁰² While the data gathered in the *In-State Programming Report* provided information about consumer access to in-state and out-of-state broadcast stations, the focus in this Report, based on the new and different directive in Section 109(a)(1)(A) of the STELAR, is on consumers’ access to out-of-market stations, and so we include data on such stations that are located either in the same or a different state as the consumer.

28. We note that, consistent with the limitations outlined in the *STELAR Report PN*,¹⁰³ in conducting our analysis we were unable to locate a single data source that would allow us to evaluate the extent to which consumers receive out-of-market broadcast programming from television broadcast stations, DBS, cable, and telephone MVPDs.¹⁰⁴ Accordingly, in order to examine this issue we have analyzed data and information from multiple sources, as outlined in further detail below. Our analysis consists of four primary components.¹⁰⁵ First, consistent with the *STELAR Report PN*, we have examined the extent to which consumers have access to out-of-market signals received over the air by constructing a database with details of the predicted signal reach of broadcast television stations.¹⁰⁶ Second, we have reviewed the out-of-market signals carried by DBS providers to analyze the degree to which satellite subscribers have access to out-of-market signals.¹⁰⁷ Third, we have looked at Nielsen data in order to

¹⁰⁰ STELAR § 109(a)(1)(A).

¹⁰¹ *STELAR Report PN*, 30 FCC Rcd at 1906.

¹⁰² See *In-State Broadcast Programming: Report to Congress Pursuant to Section 304 of the Satellite Television Extension and Localism Act of 2010*, MB Docket No. 10-238, Report, 26 FCC Rcd 11919 (2011).

¹⁰³ *STELAR Report PN*, 30 FCC Rcd at 1906-7.

¹⁰⁴ No commenter provided any suggestions for a single data source. The National Association of Broadcasters (NAB) and the Western Telecommunications Alliance – Advocates for Rural Broadband (WTA) confirm our tentative conclusion and state that they are unaware of any single data source that would enable the Commission to determine access to out-of-market broadcast programming across all distribution technologies. See National Ass’n of Broadcasters (NAB) Comments at 5; Western Telecommunications Alliance – Advocates for Rural Broadband (WTA) Comments at 4-5; WTA Reply at 2.

¹⁰⁵ We similarly noted this issue and the difficulty of obtaining useful data for cable and telephone MVPDs in the *In-State Programming Report*. See *In-State Programming Report*, 26 FCC Rcd at 11942, para 40.

¹⁰⁶ *STELAR Report PN*, 30 FCC Rcd at 1906-7.

¹⁰⁷ For purposes of this Report, we considered data about out-of-market broadcast stations carried by the two DBS operators throughout a market or portions of a market (e.g., one or more counties in a market) and do not consider carriage of out-of-market stations provided to particular “unserved” subscriber households not otherwise available throughout the market or portions of the market. Specifically, the out-of-market broadcast signals we examine for DBS include significantly viewed stations, network fill-ins imported into “short markets,” and stations carried pursuant to specific statutory copyright exceptions. See 47 U.S.C. § 339(a)(2)(C); 17 U.S.C. §§ 119(d)(10), 122(a)(2), 122(a)(4). For the purposes of this Report, we exclude from our analysis of “distant” signals those

(continued....)

examine whether Nielsen has recorded viewership of out-of-market signals in a market other than the station's home market. Fourth, we have conducted a number of case studies to examine the extent to which consumers in selected counties within DMAs that encompass multiple states have access to distant signals via cable, telephone MVPDs, DBS, or over the air, including full power, Class A, low power, and TV translator stations.

29. Noting that aggregating information at the DMA level might not provide sufficient analysis, we proposed to look at consumers' access to out-of-market signals at the county level as well as the DMA level.¹⁰⁸ We received no comments suggesting that our analysis should be done using a different geographic area. Therefore, the following analysis looks at both DMAs and counties within DMAs, as appropriate, in order to assess the extent to which consumers have access to distant signals consistent with Section 109.

30. With respect to the first component, the availability of broadcast stations over the air, we adopt a methodology similar to that used by the Bureau to calculate reception of in-state signals by households for the *In-State Programming Report*.¹⁰⁹ To perform this analysis, the Bureau used the Commission's Office of Engineering and Technology Bulletin No. 69 (OET Bulletin No. 69) methodology to predict the service area of each broadcast station.¹¹⁰ The National Association of Broadcasters (NAB) suggests that, in order to provide a complete picture of consumers' access to broadcast programming, multicast as well as primary streams should be included in the analysis.¹¹¹ While such information is not readily or consistently available for all broadcast stations, we have attempted to include information about multicast channels where available, for example in the Case Studies. For our analysis of over the air reception we include full power commercial and noncommercial educational television stations. We also include separately an analysis of over the air reception of low power, Class A, and television translator stations.

31. For the second component, DBS carriage of broadcast stations, we have used carriage information provided by DIRECTV and DISH.¹¹² For data on significantly viewed stations, DIRECTV and DISH provided the Bureau with lists of the broadcast stations that they currently carry pursuant to the station's significantly viewed status and indicated the markets in which these stations are carried.¹¹³ DISH and DIRECTV also provided the Bureau with lists of the stations that they carry in short markets to fill in a network missing in a particular market. Lastly, DISH and DIRECTV have identified stations that they carry in certain states pursuant to specific statutory copyright exceptions.

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stations that are provided on a subscriber-by-subscriber basis by satellite MVPDs to unserved subscribers as these stations are not available to all consumers in a market (or portions/counties of a market) but are unique to a particular unserved household. See 47 U.S.C. § 339(a)(2); 17 U.S.C. § 119(a)(3).

¹⁰⁸ *STELAR Report PN*, 30 FCC Rcd at 1906-7.

¹⁰⁹ *In-State Programming Report*, 26 FCC Rcd at 11932, para 21.

¹¹⁰ Federal Communications Commission, Office of Engineering and Technology Bulletin No. 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, Feb. 6, 2004 (<https://www.fcc.gov/general/oet-bulletins-line>). OET Bulletin No. 69 provides guidance on the use of the Longley-Rice propagation model to evaluate television service, coverage, and interference. See OET Bulletin No. 69 at 1.

¹¹¹ NAB Comments at 7-8.

¹¹² In the *STELAR Report PN*, we proposed also to potentially use data collected under Section 108 of the STELAR. *STELAR Report PN* at 1906. However, we find that the information obtained directly from the DBS operators offers more complete data about DBS carriage of out-of-market broadcast stations.

¹¹³ DISH informed the Bureau that it does not currently carry any broadcast stations pursuant to the significantly viewed rules.

32. Third, we attempted to analyze access to out-of-market stations within a market by looking at actual viewership of distant signals. Specifically, we examined Nielsen data for instances where a station garnered ratings in a market other than the market to which it is assigned. As discussed in the *STELAR Report PN*, we used efforts similar to those used for the *In-State Programming Report*, and sought to analyze Nielsen data to identify for each DMA the number of out-of-market broadcast stations, if any, that earned a sufficient rating from all viewing sources to warrant inclusion in Nielsen's measurement during the relevant reporting period.¹¹⁴

33. Fourth, in light of the limitations on aggregated information regarding the carriage of signals by cable and telephone MVPDs, we conducted a number of targeted case studies to analyze the availability of programming by any method, but particularly by cable or telephone MVPD. These case studies allowed us to examine a number of specific counties and markets in a more in-depth manner, and to identify and discuss the extent to which consumers in those areas have access to distant signals via the various distribution methods. The case studies also sought to gather information about the programming carried by stations received in a particular county, as well as whether the station was located in the same or a different state as the county.

34. In determining our course of analysis and honing our focus to these four primary means of examining access to out-of-market signals, we considered and discarded several other possible avenues because of various limitations. For example, the *STELAR Report PN* discussed that, while the Commission collects cable system data in its Annual Report on Cable Television Systems (FCC Form 325) and in its Annual Report on Cable Prices, these are not comprehensive or particularly suitable for our purposes here.¹¹⁵ As we noted in the *STELAR Report PN*, these data yield limited information about a small group of systems and may omit many relevant systems or geographic areas.¹¹⁶

35. In addition, the *STELAR Report PN* sought comment on whether there were other comprehensive data sets available that would allow the Commission to perform the required analysis. NAB and WTA both note that local cable systems must file semi-annually with the Copyright Office a listing of all television stations they carried, both in and outside the cable system's footprint.¹¹⁷ Further, they state that telephone companies providing MVPD service that avail themselves of the cable compulsory license must also file these lists.¹¹⁸ However, both NAB and WTA also note that these data are not reported on a DMA or state-wide basis, which would make comparisons with over the air reception and DBS carriage more difficult.¹¹⁹

36. We also examined whether data from the Warren Cable Television Factbook could be used for a systematic examination of the out-of-market signals available to consumers via cable systems

¹¹⁴ *STELAR Report PN* at 1907. See also *In-State Programming Report* 26 FCC Rcd at 11934, 11940-41, paras 27, 37.

¹¹⁵ *STELAR Report PN* at 1907-8. The Commission requires annual Form 325 filings from cable systems that serve 20,000 or more subscribers and from a sample of systems with fewer than 20,000 subscribers. See 47 CFR § 76.403.

¹¹⁶ *STELAR Report PN* at 1907-8. Further, the FCC Form 325 does not provide data on a granular level such that it could be used for a DMA or county level analysis. See *id.* at 1907. WTA claims that almost all of its members providing cable service and negatively impacted by the current DMA assignment system are "exempt" from the Form 325 requirement. See WTA Comments at 4 (WTA's claimed exemption refers to the requirement that only a sample of systems with fewer than 20,000 subscribers are required to file the form each year.).

¹¹⁷ NAB Comments at 6.

¹¹⁸ *Id.*; WTA Reply at 2-3.

¹¹⁹ NAB Comments at 6 n.12; WTA Reply at 2-3.

or telephone MPVDs. While some information regarding the carriage of distant signals can be gleaned from this source, after exploration and efforts to manipulate the available data we determined that various limitations made this information unsuitable for our purposes. In addition to a lack of data at the county level, sufficient data were not present for all DMAs. Further, for those DMAs represented, it was impossible to determine precisely what population or percentage of the DMA a particular cable system serves in those cases where there was a positive indication that a cable system in a DMA carried an out-of-market signal. In addition, lack of continuity of call signs, market names, and station properties across data sets compounded the challenges of using this source, which was not designed for the type of analysis we sought to perform.

37. NAB incorporated by reference the study by BIA/Kelsey it submitted in response to the *2011 Public Notice* that used the Copyright Office data to develop an estimate of out-of-state carriage by cable companies.¹²⁰ This study noted that the data were reported by cable system and provided one principal city and corresponding county and state.¹²¹ Using this information, BIA/Kelsey mapped these data into DMAs, but noted that the reporting unit may cross multiple counties, DMAs, and states.¹²² Given our interpretation of Section 109(a)(1)(A) that the analysis should be performed on a DMA and county level rather than a system-wide basis, however, the data from the Copyright Office, although potentially extensive, are not ideal for our purposes. The Copyright Office data are provided on a cable system basis, and, although some information is provided on the location of the system, the data are not granular enough to map directly into either a DMA or county. Therefore, numerous assumptions would need to be made to create a data set that could be combined with over the air broadcast television and DBS data. We are concerned that utilizing data that require a significant number of assumptions might not provide Congress with an analysis with a sufficient level of precision.

A. Analysis of Access to Out-of-Market Signals Over the Air

38. In order to analyze the extent to which consumers have access to out-of-market television stations received over the air, we first constructed a database compiling data on the predicted coverage of full power television stations. To calculate the values contained in the Lists provided in Appendix A, Bureau staff estimated broadcast television station coverage and interference using the Office of Engineering and Technology's (OET) Bulletin No. 69¹²³ as implemented by *TVStudy*¹²⁴ on a 2 km x 2 km grid cell basis.¹²⁵ A single point within each cell was analyzed for station coverage, and the population of

¹²⁰ Comments of the National Association of Broadcasters, MB Docket 10-238, filed Jan. 24, 2011, Attachment A at 9-11 (2011 NAB Comments).

¹²¹ *Id.*, Attachment A at 10.

¹²² *Id.*, Attachment A at 10 n.12.

¹²³ OET Bulletin No. 69 (Feb. 6, 2004) provides guidance on the use of the Longley-Rice propagation model and U.S. census blocks to evaluate TV service coverage and interference. The bulletin is available at <https://www.fcc.gov/general/oet-bulletins-line>.

¹²⁴ The FCC's Office of Engineering and Technology (OET) has released software, called *TVStudy*, which interfaces with data contained in FCC Media Bureau's CDBS/LMS databases and is used to perform coverage and interference analyses of full service digital and Class A television stations. Additional information regarding *TVStudy* is available at <https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/general/tvstudy-interference-analysis>.

¹²⁵ We have used the OET Bulletin No. 69 methodology, known as the Longley-Rice propagation model, to determine the predicted service area for purposes of our Section 109(a)(1)(A) analysis. The data set forth in this Report are based on a predictive model regarding the availability of broadcast television stations via over the air transmission. Consistent with our assessment of the questions posed by Sections 109 of the STELAR, we believe that this approach yields the most accurate data with respect to the analysis required by Section 109(a)(1)(A). In this Report, with respect to over the air broadcasting, we use the terms "receive" and "have access to" interchangeably.

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that cell was determined by summing the population for each census block¹²⁶ whose internal point¹²⁷ is within that cell. Population data come from the 2010 Census.¹²⁸ County borders were generated using GIS files from the Census Bureau.¹²⁹ Details about each broadcast television station were derived from CDBS.¹³⁰

39. The data in Appendix A's Lists include the variables listed in Table 1 below.

Table 1
Over the Air Full Power Television
Database Variables

Variables
DMA of County
Station's Assigned DMA
Station's Facility ID
Station's Call sign
Station's Service Type
Station's Network Affiliation
Station's Community of License
Station's State of License
County Name
State
Population Served by Station in County
Total Population of County
Percentage of County Population Served by Station

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We define these terms to mean that populations fall within the predicted over the air service area of out-of-state broadcast stations. Nonetheless, we recognize that certain areas may not be able to access a station for various reasons, including signal interference or the lack of a suitable antenna or other equipment. Moreover, one's ability to "receive" or "have access to" the signal of a broadcast television station via over the air transmission may be impacted by a range of other factors that we cannot determine and assess for the purposes of this Report. The Longley-Rice propagation model cannot account for these situations. Therefore, the data set forth in this Report and the Appendices are predictions of the over the air broadcast service that should be available in certain markets and to certain populations.

¹²⁶ Census blocks are statistical areas bounded by visible features, such as streets, roads, streams and railroad tracks, and by non-visible boundaries, such as selected property lines and city, township, school district and county limits, and short line-of-sight extensions of streets and roads. Census blocks do not cross county lines or state lines. Census blocks cover the entire territory of the United States, Puerto Rico, and the Island Areas. Census blocks nest within all other tabulated census geographic entities and are the basis for all tabulated data. See 2010 Census Geographic Terms and Concepts, <https://www.census.gov/geo/reference/terms.html>.

¹²⁷ The internal point of a census block is a set of geographic coordinates (latitude and longitude) that is located within a census block. See http://www.census.gov/geo/www/geo_defn.html#InternalPoint.

¹²⁸ See <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

¹²⁹ See <http://www.census.gov/geo/maps-data/>. Grid cells can overlap county borders, so population estimates may differ slightly, less than one percent, from Census data. Further, as grid cells can overlap county borders, in some cases a small amount of population from one county is added to an adjacent county, with the result that a station may be shown as serving slightly more population than exists within the county. Such deviations are typically within 1 percent or less of the population.

¹³⁰ See http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm.

40. *Full Power Television Stations.* Based on the predicted coverage for the 1,782 full power commercial and noncommercial broadcast television stations as of March 31, 2016, we are able to analyze the DMAs and counties predicted to receive a viewable signal from any given station, as well as the number and percentage of persons within either a DMA or a particular county predicted to receive such a signal. Further, knowing the DMA and state to which each station and county is assigned permits us to consider whether the station is in-market or out-of-market, or in-state or out-of-state, with respect to viewers in each county. As a result, by considering the number of out-of-market stations predicted to be received across all counties and all DMAs, we are able to analyze the extent to which consumers on average have access to out-of-market signals. For each county and DMA in the United States, List 5 in Appendix A provides a complete listing of every out-of-market full power broadcast television station, commercial or noncommercial, that can be received over the air.¹³¹ Analysis of this station database yields information about the level of access to out-of-market stations, as discussed further below.

41. Based on our analysis, the Bureau finds that the number of out-of-market full power signals available per DMA ranges from zero to 54 signals. Analysis shows a mean of approximately 20.6 out-of-market full power television signals available in a DMA, with a standard deviation of approximately 12.4.¹³² Appendix A – List 1 attached hereto, provides the signal counts, the DMA population, and out-of-market signals adjusted for coverage of DMA population for each DMA. Table 2 below presents the DMAs with no out-of-market full power television signals. In all, we determined that there are 12 DMAs that have no out-of-market full power signals, including all three Alaska DMAs and the single Hawaii DMA, which is consistent with their geography and lack of adjacent markets.

Table 2
DMAs with No Full Power Out-of-Market Signals Over the Air

DMA	Population
Anchorage, AK	445,857
Fairbanks, AK	104,995
Juneau, AK	59,192
Honolulu, HI	1,293,210
Presque Isle, ME	71,870
Bend, OR	157,733
Casper-Riverton, WY	142,751
El Paso (Las Cruces), TX	1,013,356
Harlingen-Weslaco-Brownsville-McAllen, TX	1,264,091
Las Vegas, NV	1,995,215
Santa Barbara-Santa Maria-San Luis Obispo, CA	693,532
Tucson (Sierra Vista), AZ	1,159,029

¹³¹ Appendix A – List 5 is available at <https://www.fcc.gov/2016-stelar-section-109-report-congress>.

¹³² A standard deviation is a measure of how far the values of a statistical distribution range from the mean. With a normal distribution (a statistical term that approximates to what is referred to as the “bell curve”), 68 percent of the population will fall within one standard deviation plus or minus of the mean, and 95 percent will fall within two standard deviations plus or minus of the mean. While the distribution of out-of-market signals is not a normal distribution, this rule is still an approximation of the distribution of out-of-market signals.

42. Our analysis of out-of-market signals by DMA finds that the top-five DMAs in terms of access to out-of-market signals are all located on the east coast of the United States, which again is consistent with the close proximity of numerous markets and stations. These top-five DMAs have access to between 47 and 54 out-of-market full power television signals received over the air.¹³³ Further, these five DMAs, in terms of population are large and reflect approximately 10.64% percent of the U.S. population.¹³⁴ To take into account that the five DMAs with the most out-of-market signals are also DMAs with high population, we weight the number of out-of-market signals by population.¹³⁵ Weighing the out-of-market signals by population results in a weighted average of approximately 27.8 out-of-market signals across all 210 DMAs.¹³⁶

43. Another way to account for the number of out-of-market signals being skewed to these five populous DMAs is to create a “viewability” index based on the average percent of the population within a DMA that can receive out-of-market signals.¹³⁷ To create this viewability index we use predicted coverage of out-of-market stations and calculate for each station the percent of the population of each county within each DMA the signal covers. Within each DMA, we take the mean county population coverage of out-of-market signals, and multiply this by the number of out-of-market signals by DMA.¹³⁸ Our analysis finds that, when accounting for the relative population of the markets, the viewability index yields a mean of approximately 12.7 “viewable out-of-market signals” by DMA with a standard deviation of 8.1.

44. Appendix A – List 2 presents an analysis of the number of out-of-market full power television signals available by county. This Appendix provides information on the county name, state, county DMA, total population of the county, number of out-of-market signals, and out-of-market signals adjusted for coverage of county population. This analysis finds that, when considered on a county level, the range of out-of-market full power signals available in a county is between zero and 37 signals. Riverside County, California, located in the Palm Springs, California DMA, is at the top of the scale with 37 out-of-market full power signals available to the county, largely as a result of Riverside’s proximity to the Los Angeles and San Diego DMAs.

45. Out of the 3,064 counties analyzed nationwide, 583 counties receive no out-of-market full power signals. Appendix A – List 3 provides details about such counties. The mean number of out-

¹³³ The top-five DMAs are: New York, NY with access to 54 out-of-market signals; Charlotte, NC with 50; Atlanta, GA with 49; Hartford-New Britain-Middletown, CT with 49; and Raleigh Durham, NC with 47.

¹³⁴ Internal Bureau analysis based on building DMA population from internal county populations. Note that this will differ from Nielsen analysis, which looks at television households, not total population.

¹³⁵ The arithmetic (unweighted) average calculates the average number of signals *per DMA*. However, since populations vary widely by DMA, this figure does not represent what an average person can view across DMAs; the unweighted average will treat a DMA with a tiny population the same as a DMA with the greatest population. To account for this issue, weighting the average number of signals by the population of the DMA produces an average that can be regarded as the average number of out-of-market signals an individual might receive.

¹³⁶ The unweighted average of out-of-market signals by DMA is 20.6333 with a standard deviation of 12.4129.

¹³⁷ Not all out-of-DMA signals cover the same percentage of a DMA; some cover virtually the entire DMA, and others cover less than 5 percent of a DMA. To adjust for this fact, we created a “viewability index”: based on predictions of the percentage of the counties of a DMA an out-of-market signal can reach, we multiply this percentage by the number of out-of-market signals to adjust the number of out-of-market signals for the percentage of a DMA the signals actually reach.

¹³⁸ If a DMA had three out-of-market stations and all of them reached the entire population, the number of out-of-market signals would equal the viewability index of signals at 3. If, however, each station covered one-third of the population, the number would still be three, but the viewability index would be $0.333 * 3 = 1$.

of-market full power signals available on a county basis is approximately 4.7 signals with a standard deviation of 4.6. Weighted by county population, the mean is approximately 5.9 out-of-market signals available in a county. However, just as was the case for DMAs, there are several large counties that skew this average upward, and therefore we calculate a viewability mean on a county basis as well.¹³⁹ Our analysis finds the county mean viewable out-of-market signals is approximately 2.8 with a standard deviation of 3.7.¹⁴⁰

46. We note that underpinning both the DMA and county viewability numbers is the fact that not every in-market or out-of-market full power television signal analyzed reaches 100 percent of either a county or DMA. Thus, the mean percentage of the population of a county that an in-market station signal reaches is approximately 64.5 percent with a standard deviation of 0.39.¹⁴¹ For out-of-market signals, the mean percentage of a county a signal reaches is approximately 44 percent. Further, when aggregating to the DMA level, the mean percentage of a county that an in-market station signal reaches is approximately 48 percent with a standard deviation of 0.41, and for out-of-market signals the mean is approximately 46.6 percent with a standard deviation of 0.41. Finally, when aggregating to a county level, the mean percentage of a county an in-market station signal reaches is approximately 63.5 percent with a standard deviation of 0.39, and for out-of-market signals the mean percentage of a county a signal reaches is approximately 61.4 percent with a standard deviation of 0.4.

47. *Low Power, Class A, TV Translators.* In addition to the reception of out-of-market full power stations, we also examined reception of out-of-market low power, Class A, and TV translator stations (referred to collectively in this section as “low power stations” or “low power signals”). Appendix A – List 6 provides a complete listing of every out-of-market low power, Class A, and TV

¹³⁹ To illustrate the effect of large counties on unadjusted averages, the 35 counties with 20 or more out-of-market signals (Riverside County, California; Hampden County, Massachusetts; Hampshire County, Massachusetts; Lancaster County, Pennsylvania; Franklin County, Massachusetts; Hunterdon County, New Jersey; San Diego County, California; Kern County, California; Carroll County, Maryland; Kent County, Maryland; Windham County, Connecticut; Walworth County, Wisconsin; Warren County, New Jersey; Columbiana County, Ohio; Cecil County, Maryland; Harford County, Maryland; Queen Anne’s County, Maryland; Delaware County, New York; Worcester County, Massachusetts; Richmond County, North Carolina; Jackson County, Michigan; Kent County, Rhode Island; Providence County, Rhode Island; Berrien County, Michigan; Mahoning County, Ohio; Baltimore County, Maryland; Howard County, Maryland; Montgomery County, North Carolina; Madison County, North Carolina; Litchfield County, Connecticut; New Haven County, Connecticut; Putnam County, Florida; Washington County, Rhode Island; and Greene County, Tennessee) have a mean population of 387,903, whereas the mean county population of all counties is only 100,541. Thus, the number of out-of-market signals skews toward large counties, which is not surprising because high population areas tend to have a high density of broadcast signals. For these counties, the mean number of out-of-market signals is 23, but the viewability index is 15.16.

¹⁴⁰ Because the coverage statistics for stations are calculated on a county basis, the calculation of the viewability index by county is simpler than by DMA. We multiple the total county coverage by out-of-market stations by the number of out-of-market stations by county to generate this statistic.

¹⁴¹ To calculate the viewability average, we used the station’s predicted population coverage as described above. However, in about 7.5 percent of the observations the data show that more than 100 percent of the population of the county can see the signal. As noted above, this is a result of the fact that grid cells can overlap county borders, in which case a small amount of population from one county is added to an adjacent county resulting in a station being reported as serving slightly more population than exists within the county. To correct for this, we replaced any value over 100 percent with 100 percent, and doing so altered the numbers only slightly.

translator station, commercial or noncommercial, that can be received over the air in each county and DMA in the United States.¹⁴²

48. Based on our analysis, the Bureau finds that the number of out-of-market low power station signals available per DMA ranges from zero to 12 signals. Analysis shows a mean of approximately 0.57 out-of-market low power signals available in a DMA, with a standard deviation of approximately 1.62.¹⁴³ However, our analysis shows that in the vast majority of markets – 164 DMAs – there are no out-of-market low power signals available. List 4 in Appendix A attached hereto, identifies those DMAs with no out-of-market low power signals.¹⁴⁴ This is likely a result of the fact that low power stations have much smaller signal contours than full power stations, and thus do not cover as much area. For those markets for which our analysis does find out-of-market low power signals available, List 4 in Appendix A provides the signal counts, the DMA population, and out-of-market signals adjusted for coverage of DMA population.

49. Our analysis by DMA finds that the following six markets have access to the most out-of-market low power signals: Denver, CO, with access to 12 signals; Missoula, MT, with access to ten signals; Seattle-Tacoma, WA, with access to nine signals; Salt Lake City, UT, with access to eight signals; Bakersfield, CA, with access to seven signals; and Phoenix, AZ, with access to six signals. No other DMA has access to more than four out-of-market low power signals.

50. As with full power stations above, we have considered a population-weighted mean, which results in a weighted average of approximately 0.94 out-of-market signals available per market across all 210 DMAs. Further, our analysis finds that, when accounting for the relative population of the markets, the viewability index yields a mean of approximately 0.199 “viewable out-of-market signals” by DMA, with a standard deviation of 0.528.¹⁴⁵

51. In addition to looking at reception of out-of-market low power stations on a DMA basis, we also examined reception on a county basis. Out of the 3,064 counties analyzed nationwide, the vast majority of counties – 2,530 counties – receive no out-of-market low power signals. A complete listing of these counties without access to any out-of-market low power signals is found in Appendix A – List 8.¹⁴⁶ With respect to the remaining counties, where low power signals are present, Appendix A – List 7 presents an analysis of the number of out-of-market low power television signals available per county.¹⁴⁷ List 7 provides information on the county name, state, county DMA, total population of the county, number of out-of-market signals, and out-of-market signals adjusted for coverage of county population. This analysis finds that when considered on a county level, the range of out-of-market low power signals available in a county is between zero and seven signals. Kern County, CA in the Bakersfield, CA DMA

¹⁴² Nielsen does not collect data for certain unmeasured parts of Alaska. Accordingly, we have excluded 123 low power observations (out of a total of 16,357) from our analysis, as these observations occur in the unmeasured parts of Alaska. Appendix A – List 6 is available at <https://www.fcc.gov/2016-stelar-section-109-report-congress>.

¹⁴³ See *supra* note 132.

¹⁴⁴ DMAs with no out-of-market low power signals are identified in Appendix A – List 4 by having a 0 count of out-of-DMA signals.

¹⁴⁵ As noted above, in order to calculate the viewability average we used the station’s predicted population coverage. However, because grid cells can overlap county borders, in some cases a small amount of population from one county is added to an adjacent county, resulting in a station being reported as serving slightly more population than exists within the county. To correct for this, we replaced any value over 100 percent with 100 percent, and doing so altered the numbers only slightly.

¹⁴⁶ Appendix A – List 8 is available at <https://www.fcc.gov/2016-stelar-section-109-report-congress>.

¹⁴⁷ Appendix A – List 7 is available at <https://www.fcc.gov/2016-stelar-section-109-report-congress>.

and Sanders County, MT in the Missoula, MT DMA are at the top of the scale with 7 out-of-market low power signals available to each county. Douglas County, WA in the Seattle-Tacoma, WA DMA receives four out-of-market low power signals, and no other county receives more than three.

52. The mean number of out-of-market low power signals available on a county basis is approximately 0.059 signals with a standard deviation of 0.337. Weighted by county population, the mean is approximately 0.075 out-of-market low power signals available in a county. The viewability mean calculated on a county basis reflects a vanishingly small mean of approximately 0.017 out-of-market low power signals, with a standard deviation of 0.16.

B. Carriage of Certain Out-of-Market Signals by DBS Providers

53. In addition to the stations available to consumers directly from the reception of broadcast television stations over the air, we also looked at the out-of-market stations available to consumers from DBS providers. Information on the carriage of out-of-market signals by DBS providers was obtained from the DBS providers directly. DIRECTV submitted data to Bureau staff regarding the broadcast stations that it currently carries pursuant to the station's significantly viewed status and indicated the markets in which these stations are carried. DISH confirmed to Bureau staff that it does not currently carry any stations pursuant to the significantly viewed rules. DIRECTV and DISH also provided the Bureau with lists of the stations that are carried in short markets to fill in a network missing in those particular markets.¹⁴⁸ Furthermore, DIRECTV and DISH identified stations that they carry in certain states pursuant to the specific statutory copyright exceptions in 17 U.S.C. Section 122. Appendix B hereto compiles the information and provides specific information describing the out-of-market broadcast stations available to consumers via DBS.

54. We have examined whether the DBS providers carry any out-of-market signals based on the stations' significantly viewed status in any of the counties that comprise the DMA into which they are being imported. DIRECTV provided the Bureau with lists of the broadcast stations that they currently carry pursuant to their significantly viewed status and indicated the markets in which these stations are carried. The information can be found in Appendix B's List 1 attached hereto. DISH confirmed to the Bureau that it does not currently carry any broadcast stations pursuant to their significantly viewed status. Our analysis indicates that, of the twenty stations DIRECTV lists as being carried pursuant to their significantly viewed status, nine such stations are being imported into six orphan counties that are located in out-of-state DMAs.¹⁴⁹ In each instance the significantly viewed station is also licensed to a community in the same state as the county into which its signals is being imported.¹⁵⁰

55. We also examined the information provided by DISH and DIRECTV, attached hereto in Appendix B – List 2, which identified the out-of-market stations that they carry pursuant to allowances based on filling in a missing network in short markets and pursuant to state-specific statutory copyright exceptions. In the short market data provided by DISH, none of the out-of-market stations are being imported into a short market where the counties from the same state as the out-of-market stations are

¹⁴⁸ See *supra* note 73 and accompanying text.

¹⁴⁹ The counties are Cleburne County located in Alabama but assigned to the Atlanta, Georgia DMA; Mecklenburg and Patrick Counties located in Virginia but assigned to North Carolina DMAs; Sequoyah, Ottawa, and Le Flore Counties located in Oklahoma but assigned to Arkansas and Kansas DMAs. See Appendix B.

¹⁵⁰ WVTM and WBRC are licensed to Birmingham, Alabama and are being imported into Cleburne County, Alabama. WRIC, WDBJ, WSLS, and WSET are licensed to Virginia communities and are being imported into Mecklenburg and Patrick Counties, Virginia. KOTV, KJRH, and KTUL are licensed to Tulsa, Oklahoma and are being imported into Sequoyah, Ottawa, and Le Flore Counties in Oklahoma. See Appendix B.

orphan counties.¹⁵¹ Analysis of the short market data from DIRECTV yielded three out-of-market stations that are being imported into two short markets that contain possible orphan counties. In particular, two stations licensed to Ohio communities are being imported by DIRECTV into the Parkersburg, West Virginia DMA, which has one Ohio county and two West Virginia counties. DIRECTV also imports a station licensed to a Kansas community into the short market of St. Joseph, Missouri, which has only one Kansas county and three Missouri counties.

56. Appendix B – List 3 contains information on the stations that DISH carries pursuant to the specific statutory allowances in 17 U.S.C. Section 122(a)(4). DISH states that it carries an ABC affiliate licensed to Manchester, New Hampshire throughout the state of New Hampshire, which includes the counties of Gratton and Sullivan — assigned to the Burlington, Vermont-Plattsburgh, New York DMA — and the counties of Coos and Carroll — assigned to the Portland-Auburn, Maine DMA. DISH also states that it carries affiliates of the Big Four networks licensed to Burlington, Vermont in the Vermont counties of Bennington and Windham, which are assigned to the Albany, New York DMA and the Boston, Massachusetts DMA, respectively.

57. Appendix B's List 3 also contains information on the stations carried by DIRECTV pursuant to the specific statutory allowances in 17 U.S.C. Section 122(a)(4). DIRECTV carries the ABC affiliate licensed to Manchester, New Hampshire throughout the state of New Hampshire, including the counties of Gratton, Sullivan, Coos, and Carroll, each of which is assigned to out-of-state DMAs. In addition, DIRECTV carries the affiliates of the Big Four networks licensed to Burlington, Vermont, and the PBS affiliate in the Vermont counties of Bennington and Windham. DIRECTV states that it carries three Big Four network affiliates and one noncommercial station licensed to Jackson, Mississippi in the Mississippi counties of Amite and Wilkinson, which are both assigned to the Baton Rouge, Louisiana DMA. Finally, Appendix B's List 4 details information DIRECTV provided on the PBS channels it carries pursuant to 17 U.S.C. Section 122(a)(4)(E). Utilizing this copyright exemption, DIRECTV provides PBS channels to subscribers that otherwise do not have access to an in-state, in-market PBS in a total of 28 states, effectively ensuring that consumers residing in these states have access to at least one in-state PBS station.

C. Analysis of Access to Out-of-Market Stations Based on Viewership

58. In order to provide a more complete analysis for Section 109(a)(1)(A), we reviewed Nielsen data to examine out-of-state stations that households are viewing in a market, whether via broadcast, cable, or satellite, and that meet Nielsen's minimum reporting requirements (*i.e.*, out-of-market stations that attract a minimum viewing audience). Specifically, we used Nielsen market data that identify broadcast television stations, multicast channels (which Nielsen calls subchannels), and cable networks viewed in each DMA.¹⁵² The stations included in the Nielsen data, however, are only those stations that earned a specific cumulative rating, referred to as a "cume."¹⁵³ For local broadcast stations,

¹⁵¹ We identified three short markets that consist of counties from more than one state as potential DMAs where orphan counties may be present. However, in these short markets, the out-of-market station imported into these markets is licensed to a community from the same state as the counties that make up a majority of the DMA. The Parkersburg, West Virginia DMA, which receives a fill-in station from the Charleston, West Virginia DMA, consists of two West Virginia counties and one Ohio county. The St. Joseph, Missouri DMA, which receives two fill-in stations from the Kansas City, Missouri DMA, consists of three Missouri counties and one Kansas county. The Ottumwa, Iowa-Kirkville, Missouri DMA, which receives a fill-in station from the Kansas City, Missouri DMA, consists of five Missouri counties and four Iowa counties.

¹⁵² Nielsen, *2015-2016 Local Reference Supplement: A Description of Methodology*, March 7, 2016.

¹⁵³ Four times a year (*i.e.*, February, May, July, and November, known as ratings "sweep" periods) Nielsen measures audiences for television stations assigned to all 210 DMAs and publishes this information in its Viewers in Profile

(continued....)

meaning stations whose community of license is located in the DMA for which viewership is being reported, the station must have a cume rating of at least 2.5 percent of unique households for a minimum of one quarter hour during Sunday through Saturday, 7:00 AM through 1:00 AM, to be included in this Nielsen data.¹⁵⁴ For stations being reported in a DMA other than the one in which their community of license is located, the station's cume rating must reach at least 9.5 percent of unique households in the reporting market. A similar cume rating is required for cable networks, regional cable networks, and local cable networks. We note that there may be other out-of-market signals available in a particular market; Nielsen's audience data will contain only those stations meeting Nielsen's established thresholds, and thus, may underrepresent the distant signals being viewed in a market.

59. Attached at Appendix C is a table summarizing the stations identified as having been viewed outside of their assigned market during the relevant reporting period. The Appendix indicates the station's call sign, community and state of license, home DMA, and the DMA in which it was reported. Given that Nielsen aggregates viewership information for purposes of the market data we examined, we are unable to determine precisely by what means such out-of-market signals are being viewed or distributed in the particular market. However, we note that access to the out-of-market signal must be sufficiently robust to merit measurable viewership of the out-of-market station.

60. Based on our analysis of Nielsen's viewership data, we have identified a number of instances in which viewership of a station was recorded in a market other than the market to which the station is assigned, or stated differently, instances in which Nielsen reported viewership of a out-of-market signal. Specifically, based on viewership data collected by Nielsen between October 29 and November 25, 2015, 38 of the 210 markets in the country contained at least one instance of a signal recorded in a market other than its market of origin.¹⁵⁵ In the majority of these cases, 25 markets, the data reflected viewership of one or two distant signals.¹⁵⁶ However, in six markets, typically smaller DMAs with fewer local, in-market signals, the data reflected viewership of five or six out-of-market signals.¹⁵⁷ In all, the data show 89 instances of a distant signal being viewed in a market, although some of these involve the same station being viewed in multiple markets. For example, WTTG-TV (Fox) licensed to Washington, DC appeared in the market viewing data for the Harrisonburg, VA DMA and the Baltimore, MD, DMA, in addition to its assigned DMA of Washington, DC. In all, 79 stations appeared in the Nielsen data as having been viewed outside their assigned market.¹⁵⁸

61. We have also examined whether any of these stations are considered to be significantly viewed in any of the counties that comprise the distant DMA in which Nielsen has recorded viewing of the station. By cross-referencing the Commission's significantly viewed list,¹⁵⁹ which records the counties in which a station is considered to be significantly viewed for purposes of the Commission's rules, with the counties that comprise the distant market in which the station has recorded viewing, we are

(Continued from previous page) _____

Reports. This is the source for the information provided by Nielsen. The data presented herein is for the month of November 2015.

¹⁵⁴ Nielsen, *2015-2016 Local Reference Supplement: A Description of Methodology*, March 7, 2016. This is only the minimum reporting requirement, so stations' ratings may not be reported in all sections.

¹⁵⁵ Nielsen, *Nielsen Station Index: Viewers in Profile* (multiple markets), November 2015. Commission staff analyzed Nielsen Station Index data for all 210 DMAs during the November 2015 reporting period.

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* In addition, we note that several Mexican television stations also appeared in the viewing data for particular markets, but we have not included such stations in our analysis.

¹⁵⁹ See Significantly Viewed List, at <http://www.fcc.gov/mb/>.

able to determine whether the station is considered significantly viewed in any of the counties of that DMA. In cases where such stations do appear on the significantly viewed list for such counties, we have included this information on Appendix C and indicated the specific counties. However, the fact that a station is considered to be significantly viewed in one or more counties of a market may not be indicative that the station is being carried pursuant to its status as a significantly viewed station.

D. Case Studies

62. In the *STELAR Report PN*, we sought comment on the appropriate methodologies and submission of essential data for the analysis with respect to cable and telephone MVPDs. The Bureau sought information on the best approach, and noted limitations with some available data, such as the Form 325 submissions. Recognizing a potential absence of comprehensive data for the purposes of the report, the Bureau proposed including case studies for specific counties where commenters have indicated a lack of local programming.¹⁶⁰ The Western Telecommunications Alliance – Advocates for Rural Broadband (WTA) states that many cable systems, including most if not all of WTA’s members, are exempt from the Form 325 requirement because they serve fewer than 20,000 subscribers, and so the Bureau would not be able to collect data on such cable systems through their annual reports.¹⁶¹ WTA points out that such cable services are the ones most negatively impacted by the current DMA assignment system.¹⁶² WTA supports the case study approach.¹⁶³

63. Several commenters in the record of this proceeding identified specific counties where households are either unable to receive any in-state programming or unable to receive sufficient in-state programming.¹⁶⁴ We have included in our examination many of the counties specifically identified by commenters to this proceeding. To ensure a sufficiently large and geographically diverse sample for analysis, we also independently identified and included other counties assigned to DMAs composed predominantly of counties from another state. Using a case study approach, the Bureau conducted detailed analysis of the extent to which households in these specific counties have access to out-of-market television stations via over the air reception, cable systems, and DBS operators, as detailed further below.¹⁶⁵ In all, our case studies examined 14 counties located in 11 DMAs. The full case studies are attached hereto at Appendix D.

64. Employing the database that we constructed to analyze the level of access to out-of-market signals received over the air, discussed above, we used the Longley-Rice methodology to determine the out-of-market broadcast stations available to consumers over the air in each county studied. Thus, each case study reports the number of out-of-market stations of all types, including, full power, low

¹⁶⁰ *STELAR Report PN*, 30 FCC Rcd at 1906-7.

¹⁶¹ WTA Comments at 4.

¹⁶² *Id.*

¹⁶³ *Id.* No commenter objected to the use of case studies.

¹⁶⁴ Commenters name La Plata County, Colorado; Albany County, Wyoming; Stephens County, Georgia; Garrett County, Maryland; Bristol County, Massachusetts; and Fulton County, Pennsylvania, as counties of concern. *See, e.g.*, Spencer Karter Comments (March 6, 2015); Timothy Brastow Comments (March 24, 2015); Kyle Ramie Comments (May 6, 2015); Pam Mathewson Comments (May 11, 2015); Bridget Hettgar Comments (May 13, 2015); Richard Bolt Comments (May 13, 2015); Celeste Colgan Comments (May 15, 2015); Peter Lang Comments (May 26, 2015); Tami Sorenson Comments (May 26, 2015); Linda Valenti Comments (May 28, 2015); Tammy Au-France Comments (June 4, 2015); Kenneth Allison Comments (June 5, 2015); Dean and Linda Lebeda Comments (June 8, 2015); Joe Remick Comments (June 9, 2015); Julius and Erica Muschaweck Comments (June 10, 2015); Lee Ann Stephenson Comments (June 11, 2015); Governor Matthew Mead Comments (June 11, 2015).

¹⁶⁵ *See* Appendix D.

power, Class A low power, and TV translators, both commercial and noncommercial, available to the populations of the respective counties examined.¹⁶⁶ Each case study also indicates whether the out-of-market broadcast stations available are contained on the Commission's list of significantly viewed stations for the particular county.¹⁶⁷ All of the stations listed in the case studies are identified by their station call sign, community and state of license, DMA to which they are assigned, and network affiliation, if any.

65. To describe consumers' access to out-of-market broadcast stations from cable systems, we identified the cable systems operating in the counties (or communities within those counties) in each study using the Commission's Cable Operations and Licensing System (COALS).¹⁶⁸ Where available, we used cable operators' 2015 FCC Form 325 submissions to determine the carriage of out-of-market broadcast stations. Where cable systems in the areas included in the case studies are not included in the 2015 FCC Form 325 sample because of their small size, we used Warren Television & Cable Factbook data and individual cable system websites to gather additional information.¹⁶⁹ In addition, in some counties multiple cable systems offer varying broadcast station lineups.¹⁷⁰ Rather than report on each cable system where this is the case, to get an understanding of whether out-of-market broadcast stations are being carried, we reviewed the available information and present an overview of the out-of-market stations that cable systems carry.

66. With respect to DBS carriage of out-of-market broadcast stations in each county, we utilized the data collected regarding the out-of-market signals carried by either DIRECTV or DISH, as discussed above.¹⁷¹ Drawing on this information, each case study identifies the out-of-market broadcast stations, if any, provided as part of each DBS operator's carriage of significantly viewed, short market fill-in, and statutory copyright exempted stations.¹⁷² In such cases, we have assumed that such out-of-

¹⁶⁶ Some low power and Class A broadcast stations originate in-state broadcast programming, and translators extend the geographic reach of broadcast programming; thus, estimates based only on full power broadcast stations may understate the extent to which in-state broadcast programming is available over the air. Conversely, some low power television stations, Class A stations, and translators may carry programming that originates from out-of-state broadcast stations; and, therefore, estimates that include all broadcast stations may overstate the extent to which in-state broadcast programming is available over the air.

¹⁶⁷ See Significantly Viewed List, at <http://www.fcc.gov/mb/>. As described above, significantly viewed stations are available for carriage by cable and DBS operators and are treated as local stations for copyright purposes. Cable and DBS operators must obtain retransmission consent prior to carrying out-of-market significantly viewed stations. Furthermore, we note that cable or DBS MVPD carriage of a station listed as significantly viewed does not necessarily indicate that the station is being carried by the MVPD pursuant to the significantly viewed rules.

¹⁶⁸ The Commission's COALS database can be located at <http://fjallfoss.fcc.gov/coals7>.

¹⁶⁹ Warren Communications News, Television & Cable Factbook Online, <http://www.tvcablefactbook.com> (Warren Factbook). We were not able to locate complete information from publicly available sources for every cable system listed in COALS that was not in the 2010 FCC Form 325 sample. The data are not sufficient to allow us to determine the extent to which cable is available to specific households in any particular county or community; thus, the presence of a cable system does not necessarily mean that all households have access to the out-of-market stations offered by the included cable systems.

¹⁷⁰ The data sources list call signs for the stations carried by individual cable systems. Unless otherwise noted, the data do not allow us to determine if a cable system carries the entire programming schedule of the station or only the local programming (*i.e.*, non-network, non-syndicated programming) of a station.

¹⁷¹ See *supra* para. 53.

¹⁷² The sources for information about broadcast stations' communities of license and affiliations are Nielsen, BIA/Kelsey, DISH, DIRECTV, and individual broadcast stations' websites.

market signals carried by the DBS providers are generally available throughout the market, including in the particular county being examined.

67. In discussing our findings from the case studies, we provide the number of out-of-market stations that each county receives and also identify the stations that appear on the Commission's significantly viewed list for the particular county, and thus could be carried by MVPDs pursuant to that status in those particular counties. Further, we examined whether any of the stations appearing on the significantly viewed list in the case studies are carried pursuant to the significantly viewed rules, but based on the information provided by DIRECTV and DISH, there are no stations being carried by DBS MVPDs pursuant to the significantly viewed rules in the counties selected for the case studies. Also, none of the counties in the case studies are located in a short market where one of the four major television networks is not offered on the primary stream of a local broadcast station. In the case of cable or telephone MVPDs, we are unable to determine whether the station is being carried pursuant to the significantly viewed rules based on the current data available to us. In addition, we highlight the stations licensed to communities in the same state as the county examined, including stations located in the same market, to evaluate the availability of local programming as we interpret local programming to include in-state programming consistent with Congress's intent.¹⁷³

68. We have also examined and reported on any in-market stations that are licensed to the same state as the county at issue. For cable systems, we utilized the same methodology to describe consumers' access to in-market stations as we did for access to out-of-market broadcast stations. For DBS operators, we searched the channel lineups on the websites of DIRECTV and DISH for the local channels they carry in the case study counties. Even though such stations are in-market – and thus not relevant to the question of what out-of-market stations are available to the county – to the extent that they are licensed to the same state as the county being examined, these in-market and in-state stations potentially provide relevant local programming to the county, despite the fact that the county is located in a state different from the core of the DMA.¹⁷⁴ Where relevant, we note the stations that are affiliated with the Big Four networks and/or PBS, as well as the population served by these stations relative to the county population. Finally, we identify some of the stations that appear to carry local programming relevant to the counties and the states in which they are located.¹⁷⁵

69. *La Plata County and Montezuma County, Colorado.* The counties of La Plata and Montezuma are located in Colorado but assigned to the Albuquerque-Santa Fe, New Mexico DMA, which consists primarily of twenty-eight counties in New Mexico but also a portion of an Arizona county, in addition to the two Colorado counties. While La Plata County does not receive any out-of-market stations directly over the air or any out-of-market stations considered to be significantly viewed, the cable MVPD serving the county does carry an out-of-market NBC affiliate from the Denver, Colorado DMA. DBS MVPDs in La Plata County do not carry out-of-market stations. Notably, there are television stations assigned to the Albuquerque-Santa Fe DMA that are licensed to communities in Colorado. These Colorado stations are in-state as to La Plata and Montezuma counties, and some appear to provide Colorado programming.¹⁷⁶ We note that many such in-market, in-state stations are translators and

¹⁷³ See *Senate Commerce Committee Report* at 15.

¹⁷⁴ We find that this consideration is relevant as it allows us to evaluate the extent to which consumers in those counties receive in-state programming.

¹⁷⁵ We note that our ability to evaluate programming is limited by the amount of programming information available for each station. Thus the programming we describe is not meant to be exhaustive for each county.

¹⁷⁶ KRMU airs *Rocky Mountain PBS* on all three of its multicast channels and provides news and information to La Plata County and Colorado. An additional seven in-market stations retransmit signals from broadcast stations licensed to Colorado communities.

although most are retransmitting signals from the Albuquerque-Santa Fe DMA, seven translators bring in stations licensed to Colorado communities to La Plata County.¹⁷⁷ In addition, a PBS affiliate, KRMU, licensed to Durango, Colorado, which is carried by cable, provides Colorado news and local programming to La Plata County.

70. Montezuma County receives five out-of-market stations over the air, all of which are translators rebroadcasting stations from the Denver, Colorado DMA. None of these stations are listed as significantly viewed, and each serves a very small percentage of the county's population. None of these stations are carried by cable or DBS MVPDs in Montezuma County. In addition, the county receives 23 in-market stations, which are translators that retransmit stations licensed to Colorado communities. Of these translators, five stations serve substantial portions of Montezuma County, and two are affiliated with Big Four networks.¹⁷⁸ DBS operators in Montezuma do not carry stations licensed to Colorado communities. However, the cable MVPD serving the county carries a PBS affiliate, KRMU of Durango, Colorado, which provides Colorado news and local programming to Montezuma County.

71. *Albany County and Campbell County, Wyoming.* The counties of Albany and Campbell are located in Wyoming but are assigned to the Denver, Colorado DMA, which consists of forty-eight Colorado counties, fourteen Nebraska counties, and six Wyoming counties. Albany County receives eight out-of-market stations over the air, one of which is listed as a significantly viewed station.¹⁷⁹ Of these, five stations are licensed to communities in Wyoming, and two are affiliated with Big Four networks and serve a large percentage of the county.¹⁸⁰ DBS operators do not carry out-of-market stations. The cable MVPD serving Albany County carries the significantly viewed station KGWN of Cheyenne, Wyoming and three additional out-of-market stations licensed to Wyoming communities.¹⁸¹ Also, Albany County receives two in-market, in-state stations over the air, although neither is carried by MVPDs in the county. One of these stations, a PBS affiliate, as well as the significantly viewed station KGWN and two out-of-market stations carried by cable, appear to provide local news and information relevant to Wyoming communities.

72. Campbell County receives two out-of-market stations over the air, both of which are licensed to Wyoming communities. Each serves a very small percentage of the county's population, and none of the stations are deemed significantly viewed. As in Albany County, DBS operators do not carry out-of-market stations. The cable MVPD carries the same three additional out-of-market stations licensed to Wyoming communities as in Albany County. Campbell County does not receive any in-market, in-state stations either over the air or via MVPD carriage. KGWN, as well as two of the out-of-market stations carried by cable, and one of the out-of-market stations received over the air each provide local and Wyoming state programming to Campbell County.

73. *Stephens County, Georgia.* Assigned to the Greenville-Spartanburg-Anderson, South Carolina-Ashville, North Carolina DMA, Stephens County is one of four Georgia counties that form the DMA along with fourteen North Carolina counties and ten South Carolina counties. Stephens County

¹⁷⁷ However, we note that the percentage of the county reached by these stations is quite low.

¹⁷⁸ K24CH (NBC), K28EB (CBS), K30HJ (PBS), K22CU (CW), and K26CI (MyNetworkTV) all serve at least 90 percent of Montezuma County and retransmit the programming of stations licensed to Colorado communities.

¹⁷⁹ The significantly viewed station, KGWN, is a CBS/NBC/CW affiliate and serves two percent of the county over the air. KGWN is carried by cable and DBS MVPDs in Albany County. However, the DBS operators are not carrying KGWN pursuant to its significantly viewed status.

¹⁸⁰ K19FX (CBS) and KXJB-LP (NBC) are licensed to the Wyoming communities of Cheyenne and Laramie respectively, and serve 96 percent and 93 percent of Albany County respectively.

¹⁸¹ The additional stations are KTWQ (ABC), KCWY (NBC), and KCWC (PBS).

receives two out-of-market signals over the air, one of which is from a station in the Atlanta, Georgia DMA. DBS operators do not carry out-of-market stations, but the cable MVPD serving Stephens County carries four out-of-market stations including three Big Four network affiliates and a PBS affiliate from the Atlanta, Georgia DMA. Stephens County does not receive any significantly viewed stations. The county receives two in-market stations that are licensed to Georgia communities, but no MVPD carries any in-market, in-state stations. The four out-of-market stations carried by the cable MVPD provide news and local programming from Atlanta, Georgia to Stephens County.

74. *Hunterdon County, New Jersey.* Hunterdon County is located in New Jersey but is assigned to the New York, New York DMA, which consists of fifteen New York counties, fourteen New Jersey counties, and one Pennsylvania county. Hunterdon County receives twenty-five out-of-market stations over the air, six of which are licensed to communities in New Jersey. There are five significantly viewed stations in the county, but none of the stations are licensed to New Jersey communities. DBS operators do not carry any out-of-market stations in Hunterdon County, and the cable MVPD serving the county carries nine out-of-market stations from the Philadelphia, Pennsylvania DMA, but does not carry out-of-market stations from New Jersey. In addition, nine in-market stations are licensed to New Jersey communities and can be received over the air. Among these stations are multiple PBS affiliates and a FOX affiliate that serve an extensive portion of the county.¹⁸² DBS operators also carry nine in-market, in-state stations, including the FOX and PBS affiliates. As among the in-market, in-state stations, the cable service carries only the FOX affiliate and a Univision station. The FOX and PBS affiliates provide news and local programming that include New Jersey as an area of focus.

75. *Garrett County, Maryland.* Garrett County is located in Maryland and is assigned to the Pittsburgh, Pennsylvania DMA, which also includes thirteen Pennsylvania counties and two West Virginia counties. Garrett County receives twelve out-of-market stations over the air, three of which are licensed to communities in Maryland. DBS operators do not carry out-of-market stations in Garrett County, but the cable MVPD serving the county carries three out-of-market stations — one licensed to a community in West Virginia and two in Pennsylvania. There are two significantly viewed stations in the county, but neither is licensed to a Maryland community. Only one in-market, in-state station can be received over the air. While not carried by DBS, this PBS affiliate is carried by both cable MVPDs serving Garrett County. This station and the two out-of-market stations available over the air provide local news and public affairs programming about Maryland in Garrett County.

76. *Bristol County, Massachusetts.* Bristol County is the only Massachusetts county along with five Rhode Island counties that form the Providence, Rhode Island DMA. Bristol County receives over the air eighteen out-of-market stations, seventeen of which are licensed to Massachusetts communities, including all Big Four network affiliates and two PBS stations from the Boston, Massachusetts DMA. DBS operators do not carry out-of-market stations, but the cable and telephone MVPDs serving the county together carry eleven out-of-market stations, including the aforementioned Big Four network affiliates and two PBS stations. Five significantly viewed stations, all originating from the Boston DMA, are listed for Bristol County and all are carried by the cable and telephone MVPDs.¹⁸³ There are two in-market stations licensed to Massachusetts communities. They are available over the air and are carried by all MVPDs serving the county. The out-of-market Big Four network affiliates, PBS stations, significantly viewed stations, and in-market ABC affiliate each provide Bristol County with Massachusetts programming from the Boston and New Bedford areas.

¹⁸² WWOR-TV (FOX/MyNetworkTV) serves 73 percent of Hunterdon County, and one of the PBS affiliates, WNJB, serves 95 percent of the county.

¹⁸³ We note that the MVPDs may not necessarily be carrying these stations pursuant to the significantly viewed rules.

77. *Sheridan County, Wyoming.* Assigned to the Rapid City, South Dakota DMA, Sheridan County is the only Wyoming county in the DMA, which also consists of thirteen South Dakota counties, one Montana county, and one Nebraska county. Sheridan County does not receive any out-of-market stations over the air. DBS operators do not carry any out of market signals in the county, but the cable MVPD serving Sheridan County carries four out-of-market stations, two of which are licensed to Wyoming communities and one of which is the only significantly viewed Wyoming station listed for the county. Three in-market stations licensed to Wyoming communities are available over the air, including two translators, which retransmit the signals of the two out-of-market stations carried by the cable MVPD. DBS operators serving Sheridan County do not carry any Wyoming stations, but the cable MVPD carries two in-market stations licensed to communities in Wyoming. The two out-of-market stations carried by the cable MVPD both provide Sheridan County with Wyoming daily news and public affairs programming.¹⁸⁴

78. *Sussex County, Delaware.* Sussex County is the only Delaware county assigned to the Salisbury, Maryland DMA, which also contains four Maryland counties. Sussex County receives four out-of-market stations over the air, two of which are licensed to Delaware communities. DBS operators do not carry out-of-market stations in Sussex County. Cable MVPDs carry two out-of-market stations, but none of the stations are from Delaware. There are four significantly viewed stations listed for Sussex County, but none of the stations are from Delaware. A PBS affiliate and a low power NBC affiliate are the only in-state, in-market stations that can be received over the air. DBS operators carry the two in-market Delaware stations, and both cable MVPDs serving Sussex County carry the two in-market stations plus an additional low power station. The PBS and NBC affiliates provide Sussex County with local news and community programming about the state of Delaware.

79. *Elko County, Nevada.* Elko County is located in Nevada and is assigned to the Salt Lake City, Utah DMA, which also includes twenty-nine Utah counties, three Idaho counties, and two other Nevada counties. Elko County does not receive any out-of-market stations over the air. DBS operators do not carry out-of-market stations from Nevada, but the cable MVPD serving the county carries three out-of-market stations from the Reno, Nevada DMA, including the one significantly viewed station located in Nevada and listed for Elko County. There are two other significantly viewed stations listed for the county located in the Boise, Idaho DMA. Elko County receives 36 in-market, in-state stations, but only 21 are either licensed to, or are translators of stations licensed to, Nevada communities. Many of these stations are Big Four or PBS affiliates and serve large percentages of the county.¹⁸⁵ Neither DBS nor cable MVPDs carry any in-market Nevada stations. The in-market NBC affiliate licensed to Elko, Nevada airs news and political programming about Nevada in Elko County.

80. *Fulton County, Pennsylvania, and Grant County, West Virginia.* The Washington, D.C.-Hagerstown, Maryland DMA consists of twenty-three Virginia counties, eight Maryland counties, seven West Virginia counties, one Pennsylvania county, and the District of Columbia. Fulton County, Pennsylvania receives eight out-of-market stations licensed to Pennsylvania communities, including Big Four network affiliates and PBS affiliates. Although only one station serves a little more than half of the county, two stations are listed as significantly viewed for Fulton County. No MVPD carries out-of-market stations in Fulton County. The county does not receive any in-market Pennsylvania stations over the air or via MVPD carriage. The two significantly viewed stations provide news and public information programming about Pennsylvania to Fulton County.

¹⁸⁴ KTWO-TV (ABC) and KCWC (PBS) are also the originating stations of the two translators available over the air in Sheridan County, which serve 96 percent and 89 percent of the county respectively.

¹⁸⁵ KENV-TV (NBC) serves 82 percent of Elko County. K36HA (CBS), K15EE (PBS), and K08LS (ABC) are translators that retransmit signals from Reno, Nevada and serve respective percentages of 73, 73, and 51 in Elko County.

81. Grant County receives seven out-of-market stations over the air, three of which are from West Virginia. Three of these stations are carried by the cable MVPD serving the county, but DBS MVPDs do not carry out-of-market stations in Grant County. Two significantly viewed stations licensed to West Virginia are listed for Grant County. There are six in-market stations that also are licensed to West Virginia communities, or are translators for West Virginian stations, available over the air in Grant County. None of these in-market, in-state stations are carried by MVPDs serving Grant County. The out-of-market stations from West Virginia, two of which are carried by cable, provide West Virginia local programming including news and political programming.

82. *Umatilla County, Oregon.* Umatilla County is the only Oregon county assigned to the Yakima-Pasco-Richland-Kennewick DMA, which also consists of five Washington counties. Umatilla County receives two out-of-market stations over the air from the Portland, Oregon DMA. One of these stations, a PBS affiliate, is also carried by the cable MVPD serving the county along with two other Portland stations, which are Big Four network affiliates. DBS operators in Umatilla County do not carry Oregon stations. There are no significantly viewed stations listed for the county. Umatilla County receives 16 in-market, in-state stations, of which 13 are licensed to Washington communities or are translators of such stations. DBS and cable MVPDs in Umatilla County do not carry in-market Oregon stations.¹⁸⁶ The out-of-market PBS station carried by the cable operator airs local news and Oregon state programming.

83. *Summary of Case Study Findings.* As Table 3 below illustrates, the case studies indicate that each county examined receives the signals of at least one out-of-market station either over the air or through an MVPD. In counties where there are only a few available out-of-market stations, we find that there are also in-market stations located in the same state as the county examined that provide local programming, including in-state programming, as illustrated below by Table 4. Generally, more stations are available over the air than through MVPDs, although this trend varies across the counties examined in the case studies. Also, in the counties examined, we find that cable MVPDs generally are more likely to carry out-of-market stations than DBS operators.

¹⁸⁶ DIRECTV and Charter carry KFFX-TV (FOX), which while located in Pendleton, Oregon, is actually a satellite station of KCYU-LD (FOX), located in Yakima, Washington.

Table 3
Number of Out-of-Market Stations Available to Case Study Counties¹⁸⁷

County, State	Over the Air	DBS	Cable	On Significantly Viewed List	In-State Programming¹⁸⁸
La Plata, Colorado	0	0	1(1)	0	0
Montezuma, Colorado	5(5)	0	0	0	0
Albany, Wyoming	8(5)	0	3(3)	4(1)	3
Campbell, Wyoming	2(2)	0	3(3)	2(2)	4
Stephens, Georgia	2(1)	0	4(4)	0	4
Hunterdon, New Jersey	25(6)	0	9(0)	5(0)	2
Garrett, Maryland	12(3)	0	3(0)	2(0)	2
Bristol, Massachusetts	18(17)	0	11(11)	5(5)	8
Sheridan, Wyoming	0	0	4(2)	3(1)	2
Sussex, Delaware	4(2)	0	2(0)	4(0)	0
Elko, Nevada	0	0	3(3)	3(1)	0
Fulton, Pennsylvania	8(8)	0	0	2(2)	3
Grant, West Virginia	7(3)	0	3(2)	2(0)	3
Umatilla, Oregon	2(2)	0	3(3)	0	1

¹⁸⁷ Parentheses indicate the number of out-of-market stations that are also in-state (i.e. licensed to a community in the same state as the county listed).

¹⁸⁸ Based on review of publically available sources, Bureau staff noted the number of stations located in the same state as the county that carry local news or public affairs programming. We note that our ability to evaluate programming is limited by the amount of programming information available for each station and that the number is not meant to be precise.

Table 4
Number of In-Market, In-State Stations Available to Case Study Counties¹⁸⁹

County, State	Over the Air	DBS	Cable	In-State Programming
La Plata, Colorado	10	0	1	1
Montezuma, Colorado	23	0	1	1
Albany, Wyoming	2	0	0	1
Campbell, Wyoming	0	0	0	0
Stephens, Georgia	2	0	0	0
Hunterdon, New Jersey	9	9	2	3
Garrett, Maryland	1	0	1	1
Bristol, Massachusetts	2	2	2	1
Sheridan, Wyoming	3	0	2	0
Sussex, Delaware	2	2	3	2
Elko, Nevada	21	0	0	1
Fulton, Pennsylvania	0	0	0	0
Grant, West Virginia	6	0	0	0
Umatilla, Oregon	13	0	0	0

84. Based on our findings, we note that the availability of stations via MVPD carriage in the case study counties may depend on factors such as proximity to major metropolitan areas. For example, Table 3 indicates that MVPDs located in urban counties, such as Hunterdon County and Bristol County, seem more likely to carry an abundance of in-state but out-of-market stations. In rural counties, the presence of numerous translator stations, retransmitting both in-market and out-of-market signals, seems to indicate an interest by the stations located in metropolitan areas to serve the more distant counties, regardless of whether they are located in a different state than the core of the DMA. Notably, our review of the programming provided by stations in the relevant counties shows that, where Table 3 indicates an absence of out-of-market stations providing in-state programming, Table 4 shows that there is an in-state station providing in-state programming.¹⁹⁰ Therefore, consistent with our previous findings in the *In-State Programming Report*, we continue to find that there is at least one station providing local programming, including in-state news and public affairs programming, in every county examined by the case studies.¹⁹¹

¹⁸⁹ These numbers exclude stations that are translators for stations that originate from out-of-state. Translator stations were identified using a list of TV translators available via the Media Bureau's website. See Low Power Television (LPTV), <https://www.fcc.gov/media/television/low-power-television-lptv> (last visited May 3, 2016).

¹⁹⁰ In the counties of La Plata, Montezuma, Sussex, and Elko, the last column of Table 3 indicates that there are no out-of-market stations with programming about the state in which those counties are located. However, the last column of Table 4 indicates that there is at least one in-market, in-state station that provides local programming to each of those counties.

¹⁹¹ See *In-State Programming Report*, 26 FCC Rcd at 11933-34, paras. 25-26.

IV. SECTION 109(a)(1)(B), (a)(2), AND (b): DMA ALTERNATIVES AND RECOMMENDATIONS FOR FOSTERING INCREASED LOCALISM

85. Sections 109(a)(1)(B), (a)(2), and (b) instruct the Commission to analyze alternatives to the use of DMAs in defining television markets and to discuss recommendations on how to foster increased localism in counties located in a state different from the state or states that predominantly make up the DMA, taking into account a number of factors.

A. Alternatives to the Use of Designated Market Areas

86. Section 109(a)(1)(B) requires the Commission to analyze “whether there are technologically and economically feasible alternatives to the use of designated market areas to define markets that would provide consumers with more programming options and the potential impact such alternatives could have on localism and on broadcast television locally, regionally, and nationally.”¹⁹² Based on our analysis and the comments received in this proceeding, it appears that few if any technologically and economically feasible alternatives exist to the use of Nielsen DMAs for market determination.

87. As discussed in the 2011 *In-State Programming Report*, our previous findings demonstrate that the percentage of counties that currently lack the ability to receive any in-state programming is small.¹⁹³ In the *In-State Programming Report*, the Bureau extensively examined consumers’ access to signals from both in-state and out-of-state television stations. The Bureau’s detailed analysis found that the vast majority of households and consumers have access to programming from in-state stations, with 99.98 percent of the 117.2 million total U.S. households registering access to in-state programming from at least one in-state station, either over the air or via an MVPD.¹⁹⁴ The analysis showed further that about 99.2 percent of all U.S. households can receive at least one in-state station via over the air reception, and about 98.4 percent of households have access to at least one in-state station via DBS.¹⁹⁵

88. The current record indicates that departing from the existing Nielsen DMA market determination system would create enormous disruptions in the video programming industry disproportionate to any benefit gained, and would be unlikely to increase the amount of local programming available to viewers as a whole. Furthermore, changing the market of a particular county from one DMA to another that is potentially composed of counties from the same state as the county may not necessarily increase the amount of local programming that the county receives due to the economics of broadcast television and the ability (or inability) to serve a geographically distant, but in-state county.

89. In the *STELAR Report PN*, the Commission requested suggestions on alternatives to the use of DMAs to define market areas. Small, rural MVPDs represented by WTA and the Independent Telephone & Telecommunications Alliance (ITTA) were the only commenters to suggest that the Commission consider DMA alternatives.¹⁹⁶ Specifically, WTA and ITTA state that the Commission should consider alternatives that would enable cable providers and consumers to choose which broadcast stations they wish to receive.¹⁹⁷

¹⁹² STELAR, § 109(a)(1)(B), 128 Stat. 2065.

¹⁹³ *In-State Programming Report*, 26 FCC Rcd at 11933-34, paras. 25-26.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* at 11934, para. 28.

¹⁹⁶ WTA Comments at 13; Independent Telephone & Telecommunications Alliance (ITTA) Reply at 3-5.

¹⁹⁷ WTA Comments at 13; ITTA Reply at 3-5.

90. WTA proposes that cable operators, on behalf of their customers, should have the ability to change the DMA assignment of the community in which their customers reside to a DMA in the same state as the customers' community that reflects what the cable operator determines to be the interests of the majority of the customers in that community.¹⁹⁸ Under this system, the affected broadcast stations would then have the burden of rebutting the presumption that such a change in DMA assignment is reasonable and appropriate.¹⁹⁹ WTA argues that such a presumption would aid smaller cable operators for whom the market modification process is too costly or inefficient.²⁰⁰ WTA states that the impact of such a change on broadcast viewership and advertising revenue would be minimal because "the typical subscribership of cable operators and the size of rural communities impacted by illogical DMA assignments is generally a very small proportion of the larger DMA."²⁰¹ WTA states that any negative impact on broadcasters would be outweighed by consumer benefits of greater choice and access to more relevant and timely local programming.²⁰²

91. Alternatively, WTA states that consumers should be able to select the broadcast channels provided by their cable operators on an "a la carte" basis.²⁰³ WTA states that an "a la carte" regime would give consumers the most options in choosing which DMA is the best for their local programming needs and ultimately for which broadcast stations they wish to pay.²⁰⁴ ITTA suggests an approach similar to the Senate Commerce Committee's August 2014 Local CHOICE proposal.²⁰⁵ Under ITTA's proposal, local commercial stations annually would opt for must carry or retransmission consent status in exchange for payment at a uniform per subscriber fee that applies to all MVPDs in a market.²⁰⁶ Consumers would then select which stations they want to purchase and the MVPD would collect and remit those fees to the relevant broadcaster.²⁰⁷ ITTA asserts that this proposal would give consumers the choice of whether or not to receive and pay for local broadcast stations based on their individual preferences.²⁰⁸

92. Commenters opposed to DMA alternatives argue that changing the existing DMA system would create disruptions in the television programming and advertising markets disproportionate to any benefit gained.²⁰⁹ DIRECTV adds that adopting a market determination system different from the Nielsen DMA system is infeasible, particularly for DBS providers.²¹⁰ DIRECTV states that the spot beams used to carry local television stations have been configured using the Nielsen DMA system.²¹¹ DIRECTV

¹⁹⁸ WTA Comments at 3, 9-11.

¹⁹⁹ *Id.* at 3.

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² *Id.*

²⁰³ *Id.*

²⁰⁴ *Id.* at 3-4.

²⁰⁵ ITTA Reply at 4.

²⁰⁶ *Id.*

²⁰⁷ *Id.*

²⁰⁸ *Id.*

²⁰⁹ NAB Comments at 4, 23; Joint Television Network Affiliates (JTNA) Reply at 2, 15.

²¹⁰ DIRECTV, LLC (DIRECTV) Comments at 1.

²¹¹ *Id.* at 2. Spot beam coverage is fixed on the satellites DIRECTV uses to provide local-into-local service. *Id.* at 2-3.

states that, while some of its satellites can adjust spot beams, doing so would disrupt service across several markets and negate DIRECTV's efforts to optimize population coverage.²¹² DIRECTV explains that it cannot move individual spot beams on its satellites and can only adjust slightly the entire array of spot beams on a satellite.²¹³ DIRECTV states that changing satellites to comply with DMA alternatives would render its existing satellites, representing billions of dollars, essentially useless and impose significant additional costs as well as substantial consumer disruption.²¹⁴

93. NAB states that Nielsen DMAs reflect population and economic realities and are essential to an efficient marketplace for television stations.²¹⁵ NAB adds that major changes to the existing DMA structure may be technically impractical or infeasible for broadcasters and MVPDs.²¹⁶ NAB points out that the physical limitations of broadcast signals (tower placement, signal propagation, topography) prevent stations from aligning coverage areas with state boundaries.²¹⁷ Cable headends and satellite uplink facilities could have trouble receiving a quality signal from newly aligned in-state stations.²¹⁸ Instead of adopting DMA alternatives, broadcast commenters state that existing law and Commission regulations suffice to address localism concerns.²¹⁹ NAB and the Joint Television Network Affiliates (JTNA) argue that the alternatives supported by WTA and ITTA amount to thinly veiled attempts to give MVPDs more leverage in retransmission consent negotiations.²²⁰

94. Commenters advocating for DMA alternatives generally stress the shortcomings of the current market determination system in serving rural markets.²²¹ However, NAB attributes the challenges broadcast television stations face in providing local services in rural markets to the "fundamental economics of television broadcasting," not market definitions.²²² NAB explains that television stations need large economic bases drawn from large populations to remain viable, which is why television stations are concentrated in large population centers.²²³ Rural markets have smaller populations, which means smaller sources for potential revenue and thus fewer resources to produce local programming.²²⁴ NAB argues that changing the market definitions would not alter this economic reality and thus would not result in greater localism or programming options for such areas.²²⁵

95. Given the record developed in this proceeding, as well as the record and analysis developed in the Commission's earlier *In-State Programming Report*, it does not appear that an economically and technically feasible alternative exists to the use of DMAs to define television market

²¹² *Id.* at 2-3.

²¹³ *Id.* at 2-3 & n.7.

²¹⁴ *Id.* at 3.

²¹⁵ NAB Comments at 8-12.

²¹⁶ *Id.* at 25.

²¹⁷ *Id.* at 25.

²¹⁸ *Id.* at 25.

²¹⁹ *Id.* at 13-14; JTNA Reply at 10-15.

²²⁰ NAB Reply at 6-8; JTNA Reply at 17-18.

²²¹ WTA Comments at 2; ITTA reply at 1-2.

²²² NAB Comments at 26.

²²³ *Id.* at 26.

²²⁴ *Id.* at 27.

²²⁵ *Id.* at 27.

areas. For the most part, DMAs place each county into one and only one DMA.²²⁶ Our analysis confirms that the vast majority of households receive signals from in-state television stations, regardless of the DMA to which the county is assigned. For particular counties, the DMA assignment may result in viewers receiving limited programming about the state in which the county is located. Based on our analysis of the record, the existence of such counties may have less to do with the fact that DMAs cross state lines and more to do with broadcast television economics and the incentives broadcast stations have to reach large populations.²²⁷ We agree with NAB's comments that changing the market definitions by adopting a DMA alternative would not alter this reality, nor necessarily result in such counties receiving more programming about their state.²²⁸

96. Notably, no commenter to this proceeding has proposed that the current DMA system should be abandoned entirely. Even the proposals by WTA and ITTA would rely on retaining Nielsen's market delineations.²²⁹ Furthermore, we agree with commenters that Nielsen's DMA market determination system remains the industry standard and replacing it would unduly disrupt the video programming industry and consumers.²³⁰ We are unable to identify any technologically or economically feasible alternative market determination system at this time. Instead, as discussed in the following section, we note that mechanisms that work from the current DMA system to make targeted adjustments may potentially provide consumers with more local programming relevant to the counties and states in which they reside.

B. Recommendations for Fostering Increased Localism

97. Sections 109(a)(2) and (b) of the STELAR require the Commission to discuss recommendations on ways to foster increased localism in counties served by broadcast stations licensed to out-of-state DMAs. In making recommendations, the Commission is instructed by Section 109(b) to consider: (1) the impact that DMAs that cross state lines have on access to local programming; (2) the impact that DMAs have on local programming in rural areas; and (3) the state of local programming in states served exclusively by out-of-state DMAs.

98. In the *STELAR Report PN*, the Commission sought comment and recommendations about ways to potentially increase television programming from and about the DMA and television programming from and about the state in which a consumer resides. The Commission asked commenters to address the three considerations identified in Section 109(b). In response, commenters generally referred to existing Commission regulations and procedures, which commenters suggest could be adjusted or maintained to foster increased localism.²³¹

²²⁶ Some counties are split with part of the county in one DMA and part of the county in another DMA. Also, the Commission may consider a county as part of more than one local market in certain situations such as where the local television market of a broadcast station has been modified by a market modification petition or in the case of a "switched" county (*i.e.*, one that Nielsen has moved to another DMA). See 47 U.S.C. §§ 338(l)(2)(A), 534(h)(1)(C)(i). See also 47 CFR § 76.66(e)(3) ("...a county deleted from a market by Nielsen need not be subtracted from a market in which a satellite carrier provides local-into-local service, if that county is assigned to that market in the 1999-2000 Nielsen Station Index Directory or any subsequent issue of that publication.").

²²⁷ See NAB Comments at 26-27.

²²⁸ See *Id.* at 27.

²²⁹ See WTA Comments at 13; ITTA Reply at 3-5.

²³⁰ See NAB Comments at 25; DIRECTV Comments at 3.

²³¹ In addition to the recommendations discussed by the commenters, we note that other incremental adjustments to the Commission's rules and to copyright laws could potentially assist in fostering increased localism. In the *In-State Programming Report*, we discussed a proposal to expand the license for DBS carriage of local television stations.

(continued....)

99. We note that, to the extent that fostering localism contemplates facilitating access to in-state television signals, an overwhelming majority of consumers in the United States already have access to in-state signals as shown in our prior analysis.²³² As noted above, the data from the *In-State Programming Report* shows that 99.98 percent of U.S. households have over the air or MVPD access to in-state programming from at least one in-state station.²³³ Using Nielsen data to examine in-state stations that households are watching, whether via cable, DBS, or over the air, the Commission found that about 99.4 percent of U.S. television households watch at least one in-state station.²³⁴ Furthermore, roughly 98.4 percent of U.S. households are able to receive at least one in-state broadcast station through DBS operators.²³⁵

100. In addition, despite the fact that New Jersey and Delaware, respectively, are part of DMAs (New York, NY; Philadelphia, PA; and Salisbury, MD) containing large portions of adjacent states, consumers in New Jersey and Delaware have access to a number of in-state, in-market broadcast stations. Specifically, the New York DMA contains eight full power station licensed to New Jersey. The Philadelphia, PA DMA contains eight full power station licensed to New Jersey and two full power stations licensed to Delaware. The Salisbury, MD DMA contains two low power stations licensed to Delaware.²³⁶ Thus, despite the fact that the DMAs covering these respective states are composed predominately of counties from neighboring states, consumers in New Jersey and Delaware continue to receive programming from in-market, in-state stations.²³⁷

101. The *In-State Programming Report* also estimated the extent to which households receive only out-of-state broadcast stations. The Commission found that, in all 50 states and the District of Columbia, households receiving only out-of-state stations represent an exceedingly small percentage of the population.²³⁸ The highest percentage of households that receive no in-state programming was 3.5 percent and occurred in only two states, Wyoming and New Hampshire.²³⁹ The highest number of households that receive only out-of-state stations was found in Minnesota but accounted for only about 2

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See *In-State Programming Report*, 26 FCC Rcd at 11951, paras. 60-61 (discussing the adoption of a statewide copyright license that would permit satellite carriers to retransmit in-state broadcast stations to residents of orphan counties without triggering carriage requirements beyond the current DMA-based scope of Section 338 of the Communications Act). We note that, with respect to cable MVPDs, similar adjustments could be made to the Commission's retransmission consent regime as detailed in proposed legislation offered by Representative Ben Ray Lujan during the reauthorization of STELA. See Angele A. Gilroy and Lennard G. Kruger, Cong. Research Serv., R43490, Reauthorization of the Satellite Television Extension and Localism Act (STELA) 15 & n.41 (2014) (suggesting modification of the retransmission consent and carriage rules to make delivery of in-state, out-of-market network broadcast signals to underserved consumers in counties adjacent to the market more feasible for MVPDs).

²³² See *supra* para. 87; *In-State Programming Report*, 26 FCC Rcd at 11929, para. 17.

²³³ *In-State Programming Report*, 26 FCC Rcd at 11933-34, para. 26. Although these data were collected five years ago as required by STELA, the findings remain applicable to our analysis in this report as there have not been significant changes in the video programming delivery infrastructure.

²³⁴ *Id.* at 11934, para. 27. The Commission limited its analysis to viewership that meets Nielsen's minimum reporting requirements (*i.e.*, in-state stations that attract a viewing audience comprised of at least 2.5 percent of the DMA's households). *Id.*

²³⁵ *Id.* at 11934, para. 28.

²³⁶ SNL Financial, TV Stations by Market and Affiliation (May 2016).

²³⁷ See also *supra* paras 74, 78 (discussing case studies of Hunterdon County, NJ and Sussex County, DE).

²³⁸ *In-State Programming Report*, 26 FCC Rcd at 11933, para. 24.

²³⁹ *Id.*

percent of Minnesota households.²⁴⁰ Therefore, the *In-State Programming Report* demonstrated that the percentage of households with access to in-state programming is very high while the percentage of households receiving only out-of-state stations is extremely low. For the limited situations in which particular counties, especially in rural areas, may be located in a DMA primarily composed of counties from a different state, we discuss the following recommendations for fostering additional options for local programming and access to in-state signals.

102. *Market Modification.* Broadcasters state that current Commission procedures such as market modification are adequate for addressing in-state programming needs.²⁴¹ As discussed above, the Commission has implemented the STELAR to permit DBS providers, commercial broadcast stations, and counties to file satellite market modification petitions.²⁴² Cable systems and commercial broadcast stations can file cable market modification petitions.²⁴³ The statutory factors for granting a market modification ensure that stations have a local connection to the community to be added to their local market and now include an additional factor that favors any market modification that would promote consumers' access to an in-state station.²⁴⁴ Accordingly, NAB argues that such targeted mechanisms are preferable for addressing the need for more in-state programming to replacing the DMA system.²⁴⁵ Some commenters argue that the current market modification process is costly for small, rural cable operators and has a low chance of success.²⁴⁶ ITTA describes market modifications as a time-consuming and uncertain undertaking that is cost prohibitive for many smaller MVPDs.²⁴⁷

103. Given that the market modification procedures offer the ability to alter carriage patterns and potentially secure carriage of an in-state, but formerly out-of-market station in a particular county, those procedures appear to hold great potential for fostering increased localism.²⁴⁸ The Commission has observed that the purpose of market modification is to permit adjustments to a particular station's local television market (which is initially defined by the DMA in which it is located) to better serve the value of localism by ensuring that consumers receive the broadcast stations most relevant to them.²⁴⁹

104. In addition, the Commission has strengthened this localism-oriented purpose by implementing several provisions of the STELAR through the *Satellite Market Modification Order*. Specifically, this Order expands the market modification procedures to satellite carriage of broadcast television stations.²⁵⁰ The implemented provisions also include the addition of a new factor for consideration in both cable and satellite market modification petitions, which explicitly favors

²⁴⁰ *Id.*

²⁴¹ NAB Comments at 14; JTNA Reply at 14-15.

²⁴² *See supra* para. 23.

²⁴³ 47 CFR § 76.59.

²⁴⁴ 47 U.S.C. § 534(h)(1)(C)(ii)(I)-(V); *Satellite Market Modification Order*, 30 FCC Rcd at 10409, para. 4. The Commission must also consider other relevant information to develop a result that is designed to "better effectuate the purposes" of the law. *See Cable Market Modification Second Report and Order*, 14 FCC Rcd at 8389, para. 53.

²⁴⁵ NAB Comments at 2.

²⁴⁶ WTA Comments at 9.

²⁴⁷ ITTA Reply at 2-3.

²⁴⁸ *See Chairman Wheeler's Response to Senator Johnson Regarding STELAR Implementation*, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0310/DOC-338173A1.pdf.

²⁴⁹ *Satellite Market Modification Order*, 30 FCC Rcd at 10409, para. 4.

²⁵⁰ *Id.* at 10406, para. 1.

modification if the modification will result in an increase in available in-state programming.²⁵¹ In requiring the new factor, Congress expressed concern that “many consumers, particularly those who reside in DMAs that cross State lines or cover vast geographic distances,” may “lack access to local television programming that is relevant to their everyday lives.”²⁵² This legislative history closely parallels the considerations raised in Section 109 and that Congress has instructed the Commission to take into account when making recommendations on how to foster increased localism in counties served by out-of-state DMAs. Therefore, market modification may have the most potential for fostering increased localism consistent with Congress’s concerns. In the *Satellite Market Modification Order*, the Commission observed, however, that “the ability of the market modification rules to successfully address the problem of consumer access to in-state stations will depend in large part on broadcasters’ willingness to grant retransmission consent to be carried in the new community and satellite carriers’ technical ability to provide the in-state stations in the new community.”²⁵³

105. Furthermore, in the satellite context, the Commission has also expanded the types of entities that may file a market modification petition by permitting a county governmental entity (such as a county board, council, commission or other equivalent subdivision) to file a satellite market modification petition.²⁵⁴ This change seeks to empower orphan counties to petition for inclusion of in-state stations.²⁵⁵ In addition, a county government must also be served with a copy of any satellite market modification petition should another entity initiate such a petition.²⁵⁶ This notice requirement enables county governments to become aware of such petitions and to potentially support or oppose any market modification affecting their county.²⁵⁷ As such, it affords counties an opportunity to have an impact on the programming that satellite operators provide to consumers in their area.²⁵⁸

106. The suggestion that greater flexibility in the modification of markets offers a potential solution for counties located in a state different from the core of their DMA is further supported by the fact that, since the Commission adopted the *Satellite Market Modification Order*, government officials have expressed support for the new rules as allowing rural counties to access more in-state programming.²⁵⁹ In particular, U.S. Senator Michael Bennet, who advocated for the *In-State Programming Report*, has expressed optimism that the new market modification procedures will enable

²⁵¹ *Id.* at 10409, para. 4.

²⁵² *Id.* at 10420, para. 18 (citing *Senate Commerce Committee Report* at 11).

²⁵³ *Id.* at 10406, para. 1.

²⁵⁴ *Id.* at 10409, para. 4. Finding that the cable market modification process has worked well for more than twenty years, the Commission did not expand the class of entities that may file a cable market modification petition. *Id.* at 10418, para. 15.

²⁵⁵ *Id.* at 10416-17, para. 14. The Order observes, however, that station carriage relies in part on business decisions involving broadcasters and satellite carriers and that, without the willing participation of the affected broadcaster, modifying the market of a particular television station, in itself, would not result in consumer access to that station. *Id.*

²⁵⁶ *Id.* at 10419, para. 16.

²⁵⁷ See 47 CFR § 76.59(b); *Satellite Market Modification Order*, 30 FCC Rcd at 10419, para. 16.

²⁵⁸ See *id.*

²⁵⁹ See, e.g., *FCC Finalizes Rule to Allow Four Corners to Request Colorado Broadcast TV* (Feb. 19, 2016), <https://www.bennet.senate.gov/?p=release&id=3599>; Edward Graham, *Finalized FCC rule puts Denver TV within reach* (Feb. 22, 2016), <http://www.cortezjournal.com/article/20160222/NEWS01/160229985/-1/News>.

orphan counties in Colorado to receive in-state broadcasts.²⁶⁰ In response, the Commission has stated that all market modification petitions will be “expeditiously” considered and has expressed confidence that the new procedures will increase opportunities for consumers to receive more in-state broadcast stations of local interest.²⁶¹

107. Regarding cable market modifications, while the Commission has found that the cable market modification process has worked well since being implemented more than 20 years ago,²⁶² we acknowledge commenters’ concerns that the market modification process may be too costly, time-consuming, and uncertain, especially for rural and small cable operators.²⁶³ We note that the evidentiary requirements for market modification are such that petitions have the highest chance for success when the proponents have the aid and cooperation of the station or stations that are subject to the petition.²⁶⁴ Therefore, we continue to recommend that entities considering market modification work closely with broadcast stations to ensure the standards for market modification are met.²⁶⁵ Also, Congress could consider future legislation to provide targeted relief for orphan counties located in rural areas.

108. *Carriage of Significantly Viewed Signals and Other Voluntary Agreements for Out-of-Market, In-State Programming.* Broadcasters assert that the Commission’s procedure for the carriage of significantly viewed stations is another viable method to increase localism in a manner consistent with Section 109. NAB and DIRECTV argue that encouraging voluntary agreements between MVPDs and broadcasters can address the in-state programming needs of counties located in DMAs composed largely of counties from another state or states. NAB offers that MVPDs can place out-of-market, in-state programming on a low-tier public access channel (so as not to supplant other cable programming), with the only issue being whether MVPDs are willing to do so.²⁶⁶ NAB cites many instances in which MVPDs import out-of-market, in-state television programming via agreements with broadcasters.²⁶⁷ DIRECTV also states that the best way to provide more programming options to particular counties is to allow satellite carriers to bring additional programming to subscribers in such counties where technically feasible.²⁶⁸

²⁶⁰ See Peter Marcus, *New rules may open door to Denver TV* (Sept. 8, 2015), <http://www.cortezjournal.com/article/20150908/NEWS01/150909838/0/news/New-rules-may-open-door-to-Denver-TV> (noting the efforts of U.S. Senators Michael Bennet and Mark Udall in securing provisions in the STELAR); *FCC Finalizes Rule to Allow Four Corners to Request Colorado Broadcast TV* (Feb. 19, 2016), <https://www.bennet.senate.gov/?p=release&id=3599> (noting Senator Bennet’s efforts in getting the Commission to publish the *In-State Programming Report*).

²⁶¹ *Chairman Wheeler’s Response to Senator Johnson Regarding STELAR Implementation*, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0310/DOC-338173A1.pdf.

²⁶² *Satellite Market Modification Order*, 30 FCC Rcd at 10418, para. 15 (observing that the cable market modification process has worked well for more than 20 years).

²⁶³ WTA Comments at 9; ITTA Reply at 2-3.

²⁶⁴ See *Satellite Market Modification Order*, 30 FCC Rcd at 10417-18, para. 14.

²⁶⁵ See *id.* at 10406, para. 1.

²⁶⁶ NAB Comments at 16.

²⁶⁷ *Id.* at 16 (citing three instances where MVPDs have agreements in place with broadcasters to import out-of-market, in-state television programming). To the extent that MVPDs do not pursue carriage of out-of-market, in-state television stations, NAB attributes this reluctance to the MVPDs’ business decisions. *Id.* at 17.

²⁶⁸ DIRECTV Comments at 3.

109. WTA states that cable operators attempting to negotiate carriage with out-of-market stations often face resistance stemming from provisions in network affiliation agreements.²⁶⁹ ITTA makes the same point.²⁷⁰ Furthermore, because retransmission consent is required for the carriage of significantly viewed signals, cable operators state that they often run into the similar problem of network affiliation agreements that prevent carriage of additional stations with the same network affiliation in the same market.²⁷¹

110. Broadcasters maintain in this proceeding that in-market stations would be financially harmed by the importation of out-of-market broadcast programming, unless the programming was limited to locally produced news programming or other non-duplicative programming.²⁷² Because in-market broadcast stations generally oppose the importation of out-of-market broadcast programming into their own markets, they likewise may not be willing to grant out-of-market MVPDs permission to carry their programming in other markets.²⁷³ Even when in-market and out-of-market broadcast stations can agree to the importation of out-of-market local programming, MVPDs often lack financial incentives to carry the programming.²⁷⁴ Although some MVPDs carry the locally produced news programming of out-of-market broadcast stations, this arrangement appears to be uncommon.²⁷⁵ MVPDs contend that allocating a channel and then blocking out all but the locally produced news programming would rarely be profitable, especially when the expected audiences are small.²⁷⁶

111. One possible solution could be for MVPDs to obtain consent for carriage of the local programming of several out-of-market stations and aggregate such local programming on a separate channel or channels. This approach would allow an MVPD to use fewer resources by carrying the relevant local programming from a distant, out-of-market station (or stations) on a single designated channel or on a video-on-demand basis, rather than carrying all of a station's programming and facing the need to black out all but the relevant, non-duplicative local programming.

112. *Repeal of Syndicated Exclusivity and Network Non-duplication Rules.* One commenter, ITTA, argues that the Commission should repeal the syndicated exclusivity and network non-duplication rules as a way to foster increased localism.²⁷⁷ These program exclusivity rules currently require MVPDs to delete duplicative network or syndicated programming carried on any out-of-market signals that an MVPD imports into a local market, where exclusivity provisions exist in the relevant programming

²⁶⁹ WTA Comments at 9.

²⁷⁰ ITTA Reply at 2-3.

²⁷¹ WTA Comments at 9; ITTA Reply at 2-3.

²⁷² See NAB Comments at 3-4.

²⁷³ See *id.* at 31. NAB makes the distinction that, while broadcasters oppose the importation of duplicative programming, broadcasters are willing to grant out-of-market carriage rights for non-duplicative programming. *Id.* at 16-17.

²⁷⁴ WTA Comments at 9. Although DISH did not submit comments in this proceeding, we note that DISH has suggested in the context of the recent market modification proceeding that carriage of two stations with the same network affiliation could result in the MVPD paying retransmission consent fees to two stations. DISH Comments, MB Docket No. 15-71, at 9-10 (May 13, 2015).

²⁷⁵ NAB Comments at 16.

²⁷⁶ But see *id.*

²⁷⁷ ITTA Reply at 3-4.

agreements.²⁷⁸ ITTA argues that the exclusivity rules in effect undermine the Commission's localism interest by blocking competition from out-of-market stations that would enhance the quality of local broadcast programming and the viewing options available to consumers.²⁷⁹ By contrast, ITTA states, repealing the exclusivity rules would facilitate the importation of out-of-market signals by MVPDs.²⁸⁰ ITTA argues further that allowing MVPDs to import network and syndicated programming from a station outside the DMA would create more competition among broadcasters to produce compelling local programming.²⁸¹

113. Broadcasters argue that these rules remain necessary for broadcasters to protect the value of their advertising sales and the viability of local stations. NAB asserts that the importation of duplicative out-of-market programming would reduce local stations' audiences and devalue the advertising spots that allow advertisers to reach their intended local customers, thereby resulting in a loss of advertising revenue for local stations.²⁸² NAB states that allowing MVPDs to import duplicative national network or syndicated programming thus would undermine the economic viability of in-market stations already carrying the same programming.²⁸³ NAB argues this would in turn hamper the in-market stations' ability to produce relevant local programming.²⁸⁴ ITTA argues that broadcasters no longer depend solely on advertising sales but rather rely on retransmission consent fees as their primary source of revenue.²⁸⁵ ITTA further asserts that broadcasters' arguments about the repeal of the exclusivity rules undermining localism are disingenuous as competition from out-of-market stations should incentivize local stations to produce better local programming.²⁸⁶

114. We find that the record does not establish that repeal of the syndicated exclusivity and network non-duplication rules would reliably increase localism or would have an immediate effect on the increased availability of out-of-market programming.²⁸⁷ First, the rules do not apply to the signals of significantly viewed stations or to small MVPDs serving less than 1,000 subscribers.²⁸⁸ Second, as the Commission observed in the *Exclusivity NPRM*, our syndicated exclusivity and network non-duplication rules largely have the effect of providing an additional enforcement mechanism for preexisting agreements. Parties would remain free to include exclusivity provisions in their contracts even in the absence of the Commission's rules enforcing such provisions, as they typically do today.²⁸⁹ As discussed

²⁷⁸ *Amendment of the Commission's Rules Related to Retransmission Consent*, 29 FCC Rcd at 3376, para. 41. MVPDs often will not import out-of-market signals if they are required to black out a significant portion of the programming.

²⁷⁹ ITTA Reply at 8.

²⁸⁰ *Id.* at 7.

²⁸¹ *Id.* at 8-9.

²⁸² NAB Comments at 31.

²⁸³ *Id.* at 3-4.

²⁸⁴ *Id.* at 4.

²⁸⁵ ITTA Reply at 7.

²⁸⁶ *Id.* at 8.

²⁸⁷ We express no view on other possible benefits or potential harms of repealing the rules given the existence of an open proceeding examining the issue. *See infra* note 291 and accompanying text.

²⁸⁸ *Amendment of the Commission's Rules Related to Retransmission Consent*, 29 FCC Rcd at 3378-79, paras. 44-45.

²⁸⁹ *See id.* at 3391, para. 66.

earlier, broadcast stations generally oppose the importation of out-of-market broadcast programming into their own markets and are often prohibited by their network affiliation agreements from granting retransmission consent to MVPDs for out-of-market carriage of their signals.²⁹⁰

115. We also note that the Commission has an open proceeding dedicated specifically to the future of the exclusivity rules.²⁹¹ To the extent that commenters have advocated the repeal of these rules, their comments are more properly addressed in that proceeding. With respect to fostering increased localism, we cannot conclude based on the limited record in this proceeding that repealing the exclusivity rules would necessarily increase local programming to orphan counties.

116. *Expand Satellite Carriage Requirements.* Some commenters recommend that the Commission explore mechanisms to encourage or require DBS operators to carry state public television network signals.²⁹² DIRECTV states that its technical inability to reconfigure its satellites, combined with the limited capacity on its spot beams, is why DIRECTV has largely proven unable to carry statewide networks of public television stations, as Congress permitted it to do.²⁹³ Also, NAB requests that the Commission require DIRECTV to carry local-into-local channels in all 210 DMAs.²⁹⁴

117. We note that most of the comments received concerning this issue focus on one television station in particular, a Wyoming PBS station.²⁹⁵ Considering the specific nature of the complaint, we find that a targeted solution may be preferable to expanding the carriage requirements of DBS operators nationally. In addition, the newly adopted satellite market modification procedures discussed above enable county officials, presumably at the urging of resident county consumers, to seek modification of the market of a desired station to include additional counties.²⁹⁶ Although statutory market modification provisions currently pertain only to “commercial” stations and thus exclude noncommercial stations such as PBS affiliates from the scope of market modifications, further expanding the procedures through future

²⁹⁰ See *supra* paras. 109-110.

²⁹¹ *Comment Period Extended for Further Notice of Proposed Rulemaking on Network Non-Duplication and Syndicated Exclusivity Rules*, Public Notice, 29 FCC Rcd 3925 (MB 2014).

²⁹² Oregon Public Broad. Comments at 2-4; Ass’n of Public Television Stations and Org. of State Broad. Executives Comments at 7.

²⁹³ DIRECTV Comments at 3-4.

²⁹⁴ NAB Comments at 5.

²⁹⁵ See, e.g., Pam Mathewson Comments (May 11, 2015); Bridget Hettgar Comments (May 13, 2015); Craig Blumenshine Comments (May 13, 2015); Celeste Colgan Comments (May 15, 2015); Ralph Horne Comments (May 18, 2015); Christine Warner Comments (May 18, 2015); Connie Baker Comments (May 21, 2015); Sweetwater County Democratic Party Comments (May 26, 2015); Peter Lang Comments (May 26, 2015); Tami Sorenson Comments (May 26, 2015); Cherie Longmuir Comments (May 26, 2015); Linda Valenti Comments (May 28, 2015); Tammy Au-France Comments (June 4, 2015); Kenneth Allison Comments (June 5, 2015); Dean and Linda Lebeda Comments (June 8, 2015); Holly Horton Comments (June 8, 2015); Joe Remick Comments (June 9, 2015); Julius and Erica Muschaweck Comments (June 10, 2015); Katie Peterson Comments (June 10, 2015); Paul Parmelly Comments (June 10, 2015); Walt Lashmett Comments (June 10, 2015); Jenny Williams Comments (June 10, 2015); Frances Tschacher Comments (June 10, 2015); Lee Tschacher Comments (June 10, 2015); Judith King Comments (June 10, 2015); Justin Gulley Comments (June 10, 2015); Algera and Dennis Jensen Comments (June 10, 2015); Dee Krejci Comments (June 10, 2015); C. Robb Comments (June 10, 2015); Lee Ann Stephenson Comments (June 11, 2015); Governor Matthew Mead Comments (June 11, 2015).

²⁹⁶ We note that such market modifications still must be technically and economically feasible. *Satellite Market Modification Order*, 30 FCC Rcd at 10406, para. 1.

legislation to include noncommercial stations could present a viable path for fostering increased localism.²⁹⁷

118. We note further that any expansion of satellite carriers' statutory carriage requirements would require new legislation. With regard to carriage of state public television networks, we note that changing the permissive carriage of such network stations, as currently provided for in 17 U.S.C. Section 122(a)(4)(E), into a requirement to carry these stations could be achieved only through amending the statute. Also, we note that commenters have not refuted sufficiently DIRECTV's assertions of its technical inability or the Commission's previous findings regarding the inherent limitations of satellite carriage capacity.²⁹⁸ Both Congress and the Commission have concluded that the carriage requirements of DBS operators should be limited by feasibility.²⁹⁹ The record of this proceeding provides no reason for us to depart from that conclusion. With regard to NAB's request regarding DIRECTV's carriage of local-into-local stations in all DMAs, new legislation would also be required as satellite providers are not currently required by statute to carry local programming in all 210 DMAs.³⁰⁰

119. The Virgin Islands Public Television System (VIPTS) filed comments requesting that Congress and the Commission reexamine the satellite carriage requirements with regard to the Virgin Islands and other U.S. territories.³⁰¹ VIPTS states that its public service mission is frustrated by its inability to require carriage of its local broadcast station on DBS through the "carry one, carry all" requirement.³⁰² VIPTS states that its situation results from the Commission having interpreted in the implementation of Section 210 of the Satellite Home Viewer Extension and Reauthorization Act of 2004 (SHVERA) that statutory language containing the phrase "State that is not part of the contiguous United States" was not meant to include U.S. noncontiguous territories and possessions.³⁰³ VIPTS also asks that Congress amend copyright law as needed to clarify that the Virgin Islands, and other territories as appropriate, fall within the compulsory copyright license granted to DBS carriers under Section 122 of

²⁹⁷ See *id.* at 10406, para. 1, n.2.

²⁹⁸ See *Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Communications Rules; Implementation of the Satellite Home Viewer Improvement Act of 1999: Local Broadcast Signal Carriage Issues and Retransmission Consent Issues*, Second Report and Order, Memorandum Opinion and Order, and Second Further Notice of Proposed Rulemaking, 23 FCC Rcd 5351, 5355, para. 7 (2008) ("We recognize that satellite carriers face unique capacity, uplink, and ground facility construction issues that must be factored into the timing of any HD 'carry-one, carry-all' requirement.").

²⁹⁹ See *Satellite Market Modification Order*, 30 FCC Rcd at 10406, para. 1 ("Finally, Congress recognized that satellite carriage of additional stations might be technically or economically infeasible in some circumstances. Accordingly, our rules implement this exception to the carriage requirements that would otherwise apply for modified markets.").

³⁰⁰ See 47 U.S.C. § 338. DISH, pursuant to its willing commitment as a "qualified carrier," provides local programming in all 210 DMAs. See 17 U.S.C. § 119(g); *Application of DISH Network, LLC for Qualified Carrier Certification*, MB Docket No. 10-124, Order, 25 FCC Rcd 12941 (2010) (*DISH Qualified Carrier Order*). However, in 29 DMAs, DISH is only required to reach at least 90 percent of the households in the market area based on the most recent census data released by the United States Census Bureau. See 47 U.S.C. § 342(a)(2)(A); *DISH Qualified Carrier Order*, 25 FCC Rcd at 12944-46, paras. 9-13.

³⁰¹ Virgin Islands Public Television System (VIPTS) Comments at 4-5.

³⁰² VIPTS Comments at 3.

³⁰³ VIPTS Comments at 3 (citing *Implementation of Section 210 of the Satellite Home Viewer Extension and Reauthorization Act of 2004 to Amend Section 338 of the Communications Act*, MB Docket No. 05-181, Report and Order, 20 FCC Rcd 14242, 14247, para. 10 (2005) (interpreting statutory language containing the phrase "State that is not part of the contiguous United States" as excluding noncontiguous territories and possessions)).

Title 17 of the United States Code.³⁰⁴ As with the other proposed expansions of satellite carriage requirements discussed above, VIPTS's requested changes would require new legislation to amend the aforementioned statutes.

120. *Online Access to In-State Programming.* One commenter suggests that technological innovation in the form of online video already has increased consumers' access to local programming, including in-state news and information.³⁰⁵ NAB states that content accessed via the Internet can "foster increased localism in counties served by [stations licensed to] out-of-State" DMAs, including in rural areas.³⁰⁶ NAB states that many broadcast stations have embraced the use of websites as an integral part of their core business, and many television stations' websites are becoming popular online sources for local news and information.³⁰⁷ NAB cites Radio Television Digital News Association (RTDNA) data for the assertion that every television station that provides local news also has a website that provides local news.³⁰⁸ Furthermore, the RTDNA data also indicate that about 70 percent of local news stations in the top 100 television markets provide live newscasts on their websites.³⁰⁹ Many television stations also utilize social media and mobile applications to enable greater access to their local programming by consumers.³¹⁰

121. We acknowledge that online access to broadcast television offers a method for consumers to potentially access programming from additional television stations outside their market, including access to programming from in-state stations.³¹¹ We note that online video programming distribution is unconstrained by DMA or state boundaries and therefore can be accessed by any consumer residing anywhere with a broadband Internet connection.³¹² Thus, it appears that another approach to fostering

³⁰⁴ VIPTS Comments at 4-5.

³⁰⁵ NAB Comments at 17.

³⁰⁶ *Id.*

³⁰⁷ *Id.* at 18-19.

³⁰⁸ *Id.* at 4, 19.

³⁰⁹ *Id.* at 19.

³¹⁰ *Id.* at 20 (citing the RTDNA survey that "[i]n the top 50 markets ... about 80 percent of stations responding to the survey indicated that their TV newsrooms 'constantly' use Twitter to provide updated local information and news" and that "nearly 88 percent of TV stations responding to RTDNA's survey reported that they have mobile applications").

³¹¹ In our pending Quadrennial Review proceeding, we have tentatively concluded that the overwhelming majority of consumers continue to rely on broadcast television for local programming. *2014 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, MB Docket No. 14-50 et al., Further Notice of Proposed Rulemaking and Report and Order, 29 FCC Rcd 4371, 4381-83, paras. 23-25 (2014). To the extent that broadcast programming is made available online, such online video facilitates wider access to broadcast programming and is not a substitute for broadcast television, as broadcast television stations remain the content originator even as the local programming is being accessed online or via mobile applications.

³¹² We recognize that the viability of this recommendation relies on the extent to which consumers, particularly those in rural areas, have access to broadband Internet at speeds necessary for viewing video and note that this recommendation is consistent with the Commission's continued goal of accelerating broadband deployment.

increased localism is to encourage broadcast television stations to make their local programming available online or through mobile applications if they do not do so already.³¹³

V. CONCLUSION

122. We find that, consistent with the *In-State Programming Report*, the overwhelming majority of consumers in the United States are able to access — through both out-of-market and in-market broadcast television stations — programming from television stations licensed to a community located within the same state in which they reside. Based on our analysis and the record of this proceeding, we have not identified a technologically and economically feasible alternative to the current Nielsen DMA system for defining local television markets. We have discussed potential targeted mechanisms that would utilize the existing market definition system to make specific adjustments to foster increased localism in counties served by out-of-state DMAs. Specifically, we note that the market modification provisions, as modified by the STELAR and the Commission's implementing rules, may provide relief responsive to the needs of the relatively few consumers who currently do not have access to in-state programming.

123. With this Report, the Commission satisfies the obligation pursuant to Section 109 of the STELAR to submit a report to Congress examining consumers' access to broadcast programming from outside of their local DMAs and to make recommendations on how to foster increased localism in counties served by out-of-state DMAs.

FEDERAL COMMUNICATIONS COMMISSION

William T. Lake
Chief, Media Bureau

³¹³ In addition to Internet-based, on-demand local programming provided by broadcasters on their websites and mobile applications, MVPDs could also be encouraged to provide local programming through their on-demand offerings as well. *See supra* para. 111.

EXHIBIT E

APPENDIX C

Viewership of Out-of-Market Signals Based on Nielsen Market Data

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
Alpena, MI	72052	WEYI-TV	NBC	DT	Saginaw, MI	Saginaw County	Flint-Saginaw-Bay City, MI
Alpena, MI	21254	WTOM-TV	NBC	DT	Cheboygan, MI	Cheboygan County	Traverse City-Cadillac, MI
Baltimore, MD	22207	WTTG	FOX	DT	Washington, DC	District of Columbia	Washington, DC (Hagerstown, MD)
		WTTG is considered significantly viewed in the following counties within the Baltimore market: ¹ Harford, MD Baltimore, MD Anne Arundel, MD Queen Anne, MD Kent, MD Carroll, MD Caroline County, MD (unincorporated) Howard, MD Queen Anne, MD Caroline, MD Talbot, MD					
Billings, MT	43567	KUSM-TV	PBS	DT	Bozeman, MT	Gallatin County	Butte-Bozeman, MT
Biloxi-Gulfport, MS	71357	WDSU	NBC	DT	New Orleans, LA	Orleans County	New Orleans, LA
		WDSU is significantly viewed in the following counties within the Biloxi-Gulfport market: Harrison, MS					
Biloxi-Gulfport, MS	73187	WKRG-TV	CBS	DT	Mobile, AL	Mobile County	Mobile, AL-Pensacola, FL
		WKRG is considered significantly viewed in the following counties within the Biloxi-Gulfport market: Harrison, MS Jackson, MS Stone, MS					
Bluefield-Beckley, Oak Hill, WV	71280	WCHS-TV	ABC	DT	Charleston, WV	Kanawha County	Charleston-Huntington, WV
		WCHS is considered significantly viewed in the following counties within the Bluefield-Beckley					

¹ Using the Commission's list of significantly viewed stations (<https://www.fcc.gov/mb/>), we matched significantly viewed counties with the DMAs to which they are assigned by Nielsen, and cross-referenced to isolate instances where a station appeared as significantly viewed in a county that is part of the distant (non-home) market in which the station is reported by Nielsen to have garnered ratings. In rare instances in which a station is considered significantly viewed in a city or town, as opposed to a county recognized as composing a Nielsen DMA, such observations have been dropped from our analysis.

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
		market: Raleigh, WV					
Bowling Green, KY	36504	WTVF	CBS	DT	Nashville, TN	Davidson County	Nashville, TN
		WTVF is considered significantly viewed in the following counties within the Bowling Green market: Warren, KY Metcalfe, KY Barren, KY Edmonson, KY Butler, KY Hart, KY					
Cheyenne, WY- Scottsbluff, NE	17683	KDUH-TV	ABC	DT	Scottsbluff, NE	Scotts Bluff County	Rapid City, SD
		KDUH is considered significantly viewed in the following counties within the Cheyenne, WY-Scottsbluff, NE market: Goshen, WY Scotts Bluff, NE					
Cheyenne, WY- Scottsbluff, NE	23074	KUSA	NBC	DT	Denver, CO	Arapahoe County	Denver, CO
		KUSA is considered significantly viewed in the following counties within the Cheyenne, WY-Scottsbluff, NE market: Laramie, WY					
Cheyenne, WY- Scottsbluff, NE	35883	KWGN-TV	CW	DT	Denver, CO	Arapahoe County	Denver, CO
		KWGN is considered significantly viewed in the following counties within the Cheyenne, WY-Scottsbluff, NE market: Laramie, WY					
Davenport, IA-Rock Island-Moline, IL	29095	KIIN	PBS	DT	Iowa City, IA	Johnson County	Cedar Rapids-Waterloo-Iowa City-Dubuque, IA
Elmira (Corning), NY	74034	WSKG-TV	PBS	DT	Binghamton, NY	Broome County	Binghamton, NY
Glendive, MT	47670	KHMT	FOX	DT	Hardin, MT	Big Horn County	Billings, MT
Glendive, MT	5243	KSVI	ABC	DT	Billings, MT	Yellowstone County	Billings, MT
Glendive, MT	41429	KUMV-TV	NBC	DT	Williston, ND	Williams County	Minot-Bismarck-Dickinson, ND
		KUMV is considered significantly viewed in the following counties within the Glendive market: Dawson, MT					
Glendive, MT	43567	KUSM-	PBS	DT	Bozeman, MT	Gallatin	Butte-Bozeman,

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
		TV				County	MT
Harrisonburg, VA	47904	WRC-TV	NBC	DT	Washington, DC	District of Columbia	Washington, DC (Hagerstown, MD)
Harrisonburg, VA	22207	WTTG	FOX	DT	Washington, DC	District of Columbia	Washington, DC (Hagerstown, MD)
Harrisonburg, VA	70309	WVIR-TV	NBC	DT	Charlottesville, VA	Albemarle County	Charlottesville, VA
		WVIR is considered significantly viewed in the following counties within the Harrisonburg market: Augusta/ Staunton City/ Waynesboro City, VA Rockingham/ Harrisonburg City, VA					
Helena, MT	34412	KFBB-TV	ABC	DT	Great Falls, MT	Cascade County	Great Falls, MT
		KFBB is considered significantly viewed in the following counties within the Helena market: Broadwater, MT Lewis and Clark, MT					
Helena, MT	43567	KUSM-TV	PBS	DT	Bozeman, MT	Gallatin County	Butte-Bozeman, MT
Jackson, TN	19184	WMC-TV	NBC	DT	Memphis, TN	Shelby County	Memphis, TN
		WMC is considered significantly viewed in the following counties within the Jackson market: Hardin, TN Chester, TN Madison, TN Gibson, TN Henderson, TN					
Jackson, TN	66174	WREG-TV	CBS	DT	Memphis, TN	Shelby County	Memphis, TN
Johnstown-Altoona-State College, PA	69880	WPCW	CW	DT	Jeannette, PA	Westmoreland, County	Pittsburgh, PA
Jonesboro, AR	66174	WREG-TV	CBS	DT	Memphis, TN	Shelby County	Memphis, TN
		WREG is considered significantly viewed in the following counties within the Jonesboro market: Lawrence, AR Craighead, AR Clay, AR Greene, AR					
Juneau, AK	35655	KTBY	FOX	DT	Anchorage, AK	Anchorage County	Anchorage, AK
Lafayette, IN	41397	WFYI	PBS	DT	Indianapolis, IN	Marion County	Indianapolis, IN
Lafayette, IN	39269	WISH-TV	CW	DT	Indianapolis, IN	Marion County	Indianapolis, IN
		WISH is considered significantly viewed in the following counties within the Lafayette market: Tippecanoe, IN					

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
Lafayette, IN	40877	WRTV	ABC	DT	Indianapolis, IN	Marion County	Indianapolis, IN
		WRTV is considered significantly viewed in the following counties within the Lafayette market: Tippecanoe, IN Benton, IN					
Lafayette, IN	70162	WTHR	NBC	DT	Indianapolis, IN	Marion County	Indianapolis, IN
		WTHR is considered significantly viewed in the following counties within the Lafayette market: Tippecanoe, IN Benton, IN					
Lafayette, IN	56523	WTTV	CBS	DT	Bloomington, IN	Monroe County	Indianapolis, IN
		WTTV is considered significantly viewed in the following counties within the Lafayette market: Tippecanoe, IN Benton, IN					
Lafayette, IN	146	WXIN	FOX	DT	Indianapolis, IN	Marion County	Indianapolis, IN
		WXIN is considered significantly viewed in the following counties within the Lafayette market: Tippecanoe, IN Benton, IN					
Lake Charles, LA	33471	KATC	ABC	DT	Lafayette, LA	Lafayette County	Lafayette, LA
		KATC is considered significantly viewed in the following counties within the Lake Charles market: Beauregard, LA Cameron, LA Allen, LA Calcasieu, LA					
Lake Charles, LA	10150	KBMT	ABC	DT	Beaumont, TX	Jefferson County	Beaumont-Port Arthur, TX
		KBMT is considered significantly viewed in the following counties within the Lake Charles market: Calcasieu, LA Cameron, LA					
Lake Charles, LA	35059	KLFY-TV	CBS	DT	Lafayette, LA	Lafayette County	Lafayette, LA
		KLFY is considered significantly viewed in the following counties within the Lake Charles market: Beauregard, LA Cameron, LA Allen, LA Calcasieu, LA					
Lake Charles, LA	51598	KALB-TV	CBS	DT	Alexandria, LA	Rapides County	Alexandria, LA

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
		KALB is considered significantly viewed in the following counties within the Lake Charles market: Beauregard, LA Allen, LA					
Laredo, TX	199355	XHNA	IND-SP	DT	Nuevo Laredo	Mexico	
Laredo, TX	199336	XHNT	IND-SP	DT	Naco	Mexico	
Lima, OH	71217	WBNS	CBS	DT	Columbus, OH	Franklin County	Columbus, OH
Lima, OH	41458	WHIO	CBS	DT	Dayton, OH	Darke County	Dayton, OH
		WHIO is considered significantly viewed in the following counties within the Lima market: Auglaize, OH Allen, OH					
Lima, OH	74150	WTVG	ABC	DT	Toledo, OH	Lucas County	Toledo, OH
		WTVG is considered significantly viewed in the following counties within the Lima market: Putnam, OH Allen, OH					
Mankato, MN	23079	KARE	NBC	DT	Minneapolis, MN	Hennepin County	Minneapolis-St. Paul, MN
		KARE is considered significantly viewed in the following counties within the Mankato market: Brown, MN Watsonwan, MN Blue Earth, MN					
Mankato, MN	68883	KMSP-TV	FOX	DT	Minneapolis, MN	Hennepin County	Minneapolis-St. Paul, MN
		KMSP is considered significantly viewed in the following counties within the Mankato market: Brown, MN Blue Earth, MN					
Mankato, MN	28010	KSTP-TV	ABC	DT	St. Paul, MN	Ramsey County	Minneapolis-St. Paul, MN
		KSTP is considered significantly viewed in the following counties within the Mankato market: Brown, MN Watsonwan, MN Blue Earth, MN					
Mankato, MN	68594	KTCA-TV	PBS	DT	St. Paul, MN	Ramsey County	Minneapolis-St. Paul, MN

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
Mankato, MN	9629	WCCO-TV	CBS	DT	Minneapolis, MN	Hennepin County	Minneapolis-St. Paul, MN
		WCCO is considered significantly viewed in the following counties within the Mankato market: Brown, MN Watonwan, MN Blue Earth, MN					
Monterey-Salinas, CA	35500	KQED	PBS	DT	San Francisco, CA	San Francisco County	San Francisco-Oakland-San Jose, CA
North Platte, NE	21160	KHGI	ABC	DT	Kearney, NE	Buffalo County	Lincoln-Hastings-Kearney, NE
		KHGI is considered significantly viewed in the following counties within the North Platte market: Logan, NE McPherson, NE Lincoln, NE					
Ottumwa, IA-Kirkville, MO	33710	KCCI	CBS	DT	Des Moines, IA	Polk County	Des Moines-Ames, IA
		KCCI is considered significantly viewed in the following counties within the Ottumwa, IA-Kirkville, MO market: Davis, IA Wapello, IA					
Ottumwa, IA-Kirkville, MO	29095	KIIN	PBS	DT	Iowa City, IA	Johnson County	Cedar Rapids-Waterloo, IA
Ottumwa, IA-Kirkville, MO	59444	KSHB-TV	NBC	DT	Kansas City, MO	Jackson County	Kansas City, MO
Ottumwa, IA-Kirkville, MO	66221	WHO	NBC	DT	Des Moines, IA	Polk County	Des Moines-Ames, IA
Palms Springs, CA	4328	KOCE-TV	PBS	DT	Huntington Beach, CA	Orange County	Los Angeles, CA
Parkersburg, WV	71280	WCHS-TV	ABC	DT	Charlestown, WV	Kanawha County	Charlestown-Huntington, WV
		WCHS is considered significantly viewed in the following counties within the Parkersburg market: Washington, OH Pleasants, WV					

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
		Wood, WV					
Parkersburg, WV	23342	WOWK-TV	CBS	DT	Huntington, WV	Cabell County	Charlestown-Huntington, WV
		WCHS is considered significantly viewed in the following counties within the Parkersburg market: Washington, OH Wood, WV					
Parkersburg, WV	36912	WSAZ-TV	NBC	DT	Huntington, WV	Cabell County	Charleston-Huntington, WV
		WSAZ is considered significantly viewed in the following counties within the Parkersburg market: Washington, OH Wood, WV					
Parkersburg, WV	56549	WSYX	ABC	DT	Columbus, OH	Franklin County	Columbus, OH
Parkersburg, WV	417	WVAH-TV	FOX	DT	Charleston, WV	Kanawha County	Charleston-Huntington, WV
		WVAH is considered significantly viewed in the following counties within the Parkersburg market: Washington, OH Pleasants, WV Wood, WV					
Presque Isle, ME	39644	WLBZ	NBC	DT	Bangor, ME	Penobscot County	Bangor, ME
Presque Isle, ME	3667	WVII-TV	ABC	DT	Bangor, ME	Penobscot County	Bangor, ME
Providence, RI-New Bedford, MA	25456	WBZ-TV	CBS	DT	Boston, MA	Suffolk County	Boston, MA
		WBZ is considered significantly viewed in the following counties within the Providence, RI-New Bedford, MA market: Bristol, RI Providence, RI Bristol, MA					
Providence, RI-New Bedford, MA	65684	WCVB-TV	ABC	DT	Boston, MA	Suffolk County	Boston, MA
		WCVB is considered significantly viewed in the following counties within the Providence, RI-New Bedford, MA market:					

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
		Kent, RI Providence, RI Bristol, MA					
Providence, RI-New Bedford, MA	72099	WGBH-TV	PBS	DT	Boston, MA	Suffolk County	Boston, MA
Providence, RI-New Bedford, MA	72098	WGBX-TV	PBS	DT	Boston, MA	Suffolk County	Boston, MA
Providence, RI-New Bedford, MA	72145	WHDH	NBC	DT	Boston, MA	Suffolk County	Boston, MA
		WSBK is considered significantly viewed in the following counties within the Providence, RI-New Bedford, MA market: Kent, RI Providence, RI Bristol, MA Newport, RI Bristol, RI					
Providence, RI-New Bedford, MA	73982	WSBK-TV	IND	DT	Boston, MA	Suffolk County	Boston, MA
		WSBK is considered significantly viewed in the following counties within the Providence, RI-New Bedford, MA market: Kent, RI Providence, RI Bristol, MA Newport, RI					
Salisbury, MD	65696	WBAL-TV	NBC	DT	Baltimore, MD	Baltimore City	Baltimore, MD
		WBAL is considered significantly viewed in the following counties within the Salisbury market: Sussex, DE Wicomico, MD Dorchester, MD					
Salisbury, MD	65942	WMPT	PBS	DT	Annapolis, MD	Anne Arundel County	Baltimore, MD
Springfield-Holyoke, MA	73982	WSBK-TV	IND	DT	Boston, MA	Suffolk County	Boston, MA
St. Joseph, MO	53843	KCPT	PBS	DT	Kansas City, MO	Jackson County	Kansas City, MO
St. Joseph, MO	41230	KCTV	CBS	DT	Kansas City, MO	Jackson	Kansas City, MO

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
MO					MO	County	
		KCTV is considered significantly viewed in the following counties within the St. Joseph market: De Kalb, MO Buchanan, MO Andrew, MO Doniphan, KS					
St. Joseph, MO	65686	KMBC-TV	ABC	DT	Kansas City, MO	Jackson County	Kansas City, MO
		KMBC is considered significantly viewed in the following counties within the St. Joseph market: De Kalb, MO Buchanan, MO Andrew, MO Doniphan, KS					
St. Joseph, MO	59444	KSHB-TV	NBC	DT	Kansas City, MO	Jackson County	Kansas City, MO
St. Joseph, MO	11291	WDAF-TV	FOX	DT	Kansas City, MO	Jackson County	Kansas City, MO
		WDAF is considered significantly viewed in the following counties within the St. Joseph market: De Kalb, MO Buchanan, MO Andrew, MO Doniphan, KS					
Utica, NY	23337	WBNG-TV	CBS	DT	Binghamton, NY	Broome County	Binghamton, NY
		WBNG is considered significantly viewed in the following counties within the Utica market: Otsego, NY					
Utica, NY	53734	WCNY-TV	PBS	DT	Syracuse, NY	Onondaga County	Syracuse, NY
Utica, NY	74151	WTVH	CBS	DT	Syracuse, NY	Onondaga County	Syracuse, NY
		WTVH is considered significantly viewed in the following counties within the Utica market: Otsego, NY Oneida East, NY Herkimer, NY					
Victoria, TX	26304	KENS	CBS	DT	San Antonio, TX	Bexar County	San Antonio, TX

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
		KENS is considered significantly viewed in the following counties within the Victoria market: Victoria, TX					
Washington, DC (Hagerstown, MD)	65942	WMPT	PBS	DT	Annapolis, MD	Anne Arundel County	Baltimore, MD
Watertown, NY	57476	WPTZ	NBC	DT	North Pole, NY	Essex County	Burlington-Plattsburgh, NY
		WPTZ is considered significantly viewed in the following counties within the Watertown market: St. Lawrence, NY					
Watertown, NY	21252	WSTM	NBC	DT	Syracuse, NY	Onondaga County	Syracuse, NY
		WSTM is considered significantly viewed in the following counties within the Watertown market: Lewis, NY Jefferson, NY					
West Palm Beach-Ft. Pierce, FL	14356	WPBT	PBS	DT	Miami, FL	Miami-Dade County	Miami-Ft. Lauderdale, FL
Wheeling, WV-Steubenville, OH	25454	KDKA-TV	CBS	DT	Pittsburgh, PA	Allegany County	Pittsburgh, PA
		KDKA is considered significantly viewed in the following counties within the Wheeling, WV-Steubenville, OH market: Hancock, WV Belmont, OH Wetzel, WV Ohio, WV Brooke, WV Marshall, WV Harrison, OH Jefferson, OH					
Wheeling, WV-Steubenville, OH	65681	WTAE-TV	ABC	DT	Pittsburgh, PA	Allegany County	Pittsburgh, PA
		WTAE-TV is considered significantly viewed in the following counties within the Wheeling, WV-Steubenville, OH market: Hancock, WV Belmont, OH Wetzel, WV Ohio, WV					

Distant DMA In Which Station is Reported	Facility ID	Station's Call Sign	Station's Network Affiliation	Type Service	Station's City, State of License	Station's County	Station's Assigned DMA
		Brooke, WV Marshall, WV Harrison, OH Jefferson, OH Monroe, OH					
Youngstown, OH	25454	KDKA- TV	CBS	DT	Pittsburgh, PA	Allegheny County	Pittsburgh, PA
Zanesville, OH	71217	WBNS	CBS	DT	Columbus, OH	Franklin County	Columbus, OH
		WBNS is considered significantly viewed in the following counties within the Zanesville market: Muskingum, OH					
Zanesville, OH	50781	WCMH- TV	NBC	DT	Columbus, OH	Franklin County	Columbus, OH
		WCMH is considered significantly viewed in the following counties within the Zanesville market: Muskingum, OH					
Zanesville, OH	66185	WOSU	PBS	DT	Columbus, OH	Franklin County	Columbus, OH
Zanesville, OH	56549	WSYX	ABC	DT	Columbus, OH	Franklin County	Columbus, OH
		WSYX is considered significantly viewed in the following counties within the Zanesville market: Muskingum, OH					
Zanesville, OH	74137	WTTE	FOX	DT	Columbus, OH	Franklin County	Columbus, OH
		WTTE is considered significantly viewed in the following counties within the Zanesville market: Muskingum, OH					

APPENDIX D

Case Studies

1. The case studies below are part of our Section 109 analysis. The record of this proceeding identified specific counties where commenters indicated a limited ability to receive in-state programming. In addition, we have independently identified counties located in a state other than the dominate state (or states) of the county's DMA that we determined would be appropriate for further study. Herein, we provide an in-depth analysis of the extent to which consumers in these specific geographic areas have access to out-of-market programming via over the air reception, cable systems, and DBS operators.

2. Employing the database that we constructed to analyze the level of access to out-of-market signals received over the air, discussed above, we used the Longley-Rice methodology to determine the out-of-market broadcast stations available to consumers over the air in each county studied. Thus, each case study reports the number of out-of-market stations of all types, including, full power, low power, Class A low power, and TV translators, both commercial and noncommercial, available to the populations of the respective counties examined.¹ Each case study also indicates whether the out-of-market broadcast stations available are contained on the Commission's list of significantly viewed stations for the particular county.² All of the stations listed in the case studies are identified by their station call sign, community and state of license, DMA to which they are assigned, and network affiliation, if any.

3. To describe consumers' access to out-of-market broadcast stations from cable systems, we identified the cable systems operating in the counties (or communities within those counties) in each study using the Commission's Cable Operations and Licensing System (COALS).³ Where available, we used cable operators' 2015 FCC Form 325 submissions to determine the carriage of out-of-market broadcast stations. Where cable systems in the areas included in the case studies are not included in the 2015 FCC Form 325 sample because of their small size, we used Warren Television & Cable Factbook data and individual cable system websites to gather additional information.⁴ In addition, in some counties multiple cable systems offer varying broadcast station lineups.⁵ Rather than report on each cable system

¹ Some low power and Class A broadcast stations originate in-state broadcast programming, and translators extend the geographic reach of broadcast programming; thus, estimates based only on full power broadcast stations may understate the extent to which in-state broadcast programming is available over the air. Conversely, some low power television stations, Class A stations, and translators may carry programming that originates from out-of-state broadcast stations; and, therefore, estimates that include all broadcast stations may overstate the extent to which in-state broadcast programming is available over the air.

² See Significantly Viewed List, at <http://www.fcc.gov/mb/>. As described above, significantly viewed stations are available for carriage by cable and DBS operators and are treated as local stations for copyright purposes. Cable and DBS operators must obtain retransmission consent prior to carrying out-of-market significantly viewed stations. Furthermore, we note that cable or DBS MVPD carriage of a station listed as significantly viewed does not necessarily indicate that the station is being carried by the MVPD pursuant to the significantly viewed rules.

³ The Commission's COALS database can be located at: <http://fjallfoss.fcc.gov/coals7>.

⁴ Warren Communications News, Television & Cable Factbook Online, <http://www.tvcablefactbook.com> (Warren Factbook). We were not able to locate complete information from publicly available sources for every cable system listed in COALS that was not in the 2010 FCC Form 325 sample. The data are not sufficient to allow us to determine the extent to which cable is available to specific households in any particular county or community; thus, the presence of a cable system does not necessarily mean that all households have access to the out-of-market stations offered by the included cable systems.

⁵ The data sources list call signs for the stations carried by individual cable systems. Unless otherwise noted, the data do not allow us to determine if a cable system carries the entire programming schedule of the station or only the local programming (*i.e.*, non-network, non-syndicated programming) of a station.

where this is the case, to get an understanding of whether out-of-market broadcast stations are being carried, we reviewed the available information and present an overview of the out-of-market stations that cable systems carry.

4. To describe consumers' access to out-of-market broadcast stations from DBS providers, we utilized the data collected regarding the out-of-market signals carried by either DIRECTV or DISH. Drawing on this information, each case study identifies the out-of-market broadcast stations, if any, provided as part of each DBS operator's carriage of significantly viewed, short market fill-in, and statutory copyright exempted stations.⁶ In such cases, we have assumed that such out-of-market signals carried by the DBS providers are generally available throughout the market, including in the particular county being examined.

5. The case study data provide the number of out-of-market stations that each county receives and also identify the stations that appear on the Commission's significantly viewed list for the particular county, and thus could be carried by MVPDs pursuant to that status in those particular counties. Further, the study notes whether any of the stations appearing on the significantly viewed list in the case studies are carried pursuant to the significantly viewed rules, but based on the information provided by DIRECTV and DISH, there are no stations being carried by DBS MVPDs pursuant to the significantly viewed rules in the counties selected for the case studies. Also, none of the counties in the case studies are located in a short market where one of the four major television networks is not offered on the primary stream of a local broadcast station. In the case of cable or telephone MVPDs, we are unable to determine whether the station is being carried pursuant to the significantly viewed rules based on the current data available to us. In addition, the case studies highlight the stations licensed to communities in the same state as the county examined, including stations located in the same market, to evaluate the availability of local programming as we interpret local programming to include in-state programming consistent with Congress's intent.

6. The case studies also examined and reported on any in-market stations that are licensed to the same state as the county at issue. For cable systems, we utilized the same methodology to describe consumers' access to in-market stations as we did for access to out-of-market broadcast stations. For DBS operators, we searched the channel lineups on the websites of DIRECTV and DISH for the local channels they carry in the case study counties. Even though such stations are in-market – and thus not relevant to the question of what out-of-market stations are available to the county – to the extent that they are licensed to the same state as the county being examined, these in-market and in-state stations potentially provide relevant local programming to the county, despite the fact that the county is located in a state different from the core of the DMA.⁷ Lastly, we identify the stations that appear to carry local programming relevant to the counties and the states in which they are located.⁸

7. The case studies below examine particular counties within certain DMAs and provide the following information:

⁶ The sources for information about broadcast stations' communities of license and affiliations are Nielsen, BIA/Kelsey, DISH, DIRECTV, and individual broadcast stations' websites.

⁷ We find that this consideration is relevant as it allows us to evaluate the extent to which consumers in those counties receive in-state programming.

⁸ We examined publically available programming information from sources including the stations' websites and programming guides for programs that appear to provide local news or public affairs content relevant to the state in which the case study county is located. We note that our ability to evaluate programming thus is limited by the amount of programming information available for each station. Thus the programming we describe is not meant to be exhaustive for each county.

1. **Out-of-Market Stations Received in the County.** Listed first in each of the case studies are out-of-market stations, i.e., stations that are assigned to a DMA other than the DMA to which the county being examined is assigned. Out-of-market stations have been reported regardless of whether they are located in the same state as the particular county being examined (i.e., in-state), or in a different state from the county being examined (i.e., out-of-state). The information is organized according to whether the stations are available via over the air reception, DBS, or MVPD. In addition, out-of-market stations that are on the Commission's significantly viewed list have also been indicated.
2. **In-State, In-Market Stations Received in the County.** Next, the case studies list stations that are assigned to the same market as the county being examined and that are also licensed to the same state as the county. Again, the information is organized according to whether the stations are available via over the air reception, DBS, or MVPD.
3. **In-State Programming Received in the County.** Last, the studies attempt to provide some information about the programming that is received in the county from stations that are licensed to the same state as the relevant county. In examining the programming available from stations located in the same state as the county, examples have typically been drawn from out-of-market, in-state stations, rather than stations that are in-market and in-state.

I. *Albuquerque-Santa Fe, NM DMA:* La Plata County and Montezuma County in Colorado are assigned to the Albuquerque-Santa Fe, New Mexico, DMA ranked 48th and based in the state of New Mexico. The Albuquerque-Santa Fe DMA also includes a portion of Apache County Arizona, and 28 counties in New Mexico. This case study specifically considers La Plata and Montezuma Counties.

A. La Plata County, Colorado

1. Out-of-Market Broadcast Stations Received in La Plata County, Colorado:

- Out-of-Market Broadcast Stations Received Over the Air (OTA)
 - La Plata County has a total population of 51,334.
 - La Plata County does not receive out-of-market broadcast stations over the air.
- Out-of-Market Stations on the Significantly Viewed Station List for La Plata County, Colorado
 - La Plata County does not receive out-of-market significantly viewed broadcast stations.
- Out-of-Market Stations Carried By DBS
 - Both DISH and DIRECTV offer local into local service in the Albuquerque-Santa Fe, NM DMA. Neither provider offers out-of-market stations as part of their service.
- Out-of-Market Stations Carried By Cable
 - Charter Communications⁹ is the cable MVPD in La Plata County and also serves the following communities: Dolores, Durango, Hermosa, and Mancos, Colorado.
 - Charter offers one out-of-market broadcast station in the Albuquerque-Santa Fe, NM DMA.

Station	Type of	Station's Assigned	City, State of	In-State as to La Plata	Network	Significantly	Charter
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⁹ Charter Communications, Inc., <https://www.charter.com/browse/content/new-channel-lineup> (last visited June 1, 2016).

	Service	DMA	License	County, CO?	Affiliation	Viewed?	Carriage?
KUSA	DT	Denver, CO	Denver, CO	Yes	NBC, Justice TV, WeatherNation	No	Yes

2. In-State, In-Market Broadcast Stations Received in La Plata County, Colorado:

- In-State, In-Market Broadcast Stations Received Over the Air
 - La Plata County has a total population of 51,334. The following in-market, broadcast stations are received over the air:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to La Plata County, CO?	Network Affiliation	Significantly Viewed?	Population Served by in the County	% of County served by this station
KRMU	DT	Albuquerque-Santa Fe, NM	Durango, CO	Yes	PBS	No	49,330	96%
KRTN-TV	DT	Albuquerque-Santa Fe, NM	Durango, CO	Yes	MeTV, Justice TV, Buzz	No	48,933	95%
KREZ-TV ¹⁰	DT	Albuquerque-Santa Fe, NM	Durango, CO	Yes	CBS, Get TV	Yes	50,789	99%
KREZ-LD	LD	Albuquerque-Santa Fe, NM	Durango, CO	Yes	FOX	Yes	30,299	59%
K13XX	LD	Albuquerque-Santa Fe, NM	Hesperus, CO	Yes	FOX	No	1,688	3%
K24CH	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	NBC	No	1,941	4%
K27IG	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	FOX	No	384	1%
K22CU	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	CW	No	1,144	2%
K18DR	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	EDU	No	2,932	6%
K07UY	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	IND	No	11,616	23%
K11LP	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	NBC	No	13,260	26%
K51DB	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	PBS	No	2,128	4%
K26CI	LD	Albuquerque-	Cortez, CO	Yes	MNT	No	2,467	5%

¹⁰ KREZ-TV, Durango, Colorado, is a satellite and retransmits the programming of station KRQE-TV, Albuquerque, New Mexico. See KRQE-TV, <http://www.krqe.com/subindex/news/local/northwest> (last visited June 1, 2016).

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to La Plata County, CO?	Network Affiliation	Significantly Viewed?	Population Served by in the County	% of County served by this station
		Santa Fe, NM						
K50FS	LD	Albuquerque-Santa Fe, NM	Bayfield, CO	Yes	FOX	No	29,690	58%
K30HJ	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	PBS	No	3,130	6%
K49EQ	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	ABC	No	3,104	6%
K09YK	LD	Albuquerque-Santa Fe, NM	Durango, CO	Yes	IND	No	11,400	22%
K16GZ	LD	Albuquerque-Santa Fe, NM	Durango, CO	Yes	IND	No	35,274	69%
K02QI	LD	Albuquerque-Santa Fe, NM	Hesperus, CO	Yes	PBS	No	1,671	3%
K02ET	LD	Albuquerque-Santa Fe, NM	Vallecito, CO	Yes	NBC	No	628	1%
K46FM	LD	Albuquerque-Santa Fe, NM	Bayfield, CO	Yes	NBC	No	27,281	53%
K04PJ	LD	Albuquerque-Santa Fe, NM	Hesperus, CO	Yes	ABC	No	2,900	6%
K28EB	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	CBS	No	2,467	5%
K13PJ	LD	Albuquerque-Santa Fe, NM	Vallecito, CO	Yes	ABC	No	12,114	24%
K31FV	LD	Albuquerque-Santa Fe, NM	Durango, CO	Yes	CBS	No	32,093	63%
K25GE	LD	Albuquerque-Santa Fe, NM	Durango, CO	Yes	NBC	No	43,063	84%
K29GO	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	CBS	No	1,736	3%
K41DE	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	PBS	No	12,085	24%
K36IH	LD	Albuquerque-Santa Fe, NM	Ignacio, CO	Yes	PBS	No	28,035	55%
K10AD	LD	Albuquerque-Santa Fe, NM	Vallecito, CO	Yes	NBC	No	11,229	22%
K08ET	LD	Albuquerque-Santa Fe, NM	Vallecito, CO	Yes	CBS	No	12,142	24%
K45DH	LD	Albuquerque-Santa Fe, NM	Durango, CO	Yes	ABC	No	44,681	87%

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to La Plata County, CO?	Network Affiliation	Significantly Viewed?	Population Served by in the County	% of County served by this station
K09DM	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	ABC	No	11,614	23%
K48NK	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	ION	No	2,133	4%
K42DI	LD	Albuquerque-Santa Fe, NM	Bayfield, CO	Yes	CBS	No	28,110	55%
K35CH	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	ABC	No	1,144	2%

- DBS Carriage of In-State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Albuquerque-Santa Fe DMA. Neither provider offers Colorado broadcast stations as part of their service.
- Cable Carriage of In-State, In-Market Broadcast Stations

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to La Plata County, CO?	Network Affiliation	Significantly Viewed?	Charter Carriage?
KREZ-TV	DT	Albuquerque-Santa Fe, NM	Durango, CO	Yes	CBS, FOX, Get TV	Yes	Yes
KRMU	DT	Albuquerque-Santa Fe, NM	Durango, CO	Yes	PBS	No	Yes

3. In-State Programming in La Plata County, Colorado

- Local News Programming Received Over the Air
 - Programming provided by stations located in Colorado, the same state as La Plata County, Colorado, include:
 - KRMU (PBS/Create/Viva), located in Durango, Colorado, is an affiliate of PBS, Create, and Viva. KRMU provides news and information to La Plata County and the state of Colorado. This station airs, *Rocky Mountain PBS*¹¹ on all three of its multicast channels, each with individual schedules of all day educational local and in-state programming.

¹¹ Rocky Mountain PBS, <http://www.rmpbs.org/home/> (last visited June 1, 2016).

B. Montezuma County, Colorado**1. Out-of-Market Broadcast Stations Received in Montezuma County, Colorado:**

- Out-of-Market Broadcast Stations Received Over the Air (OTA)
 - Montezuma County has a total population of 25,535. The following out-of-market stations are received over the air:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Montezuma County, CO?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
K17GE	LD	Denver, CO	Dove Creek, CO	Yes	ABC	No	170	1%
K21GT	LD	Denver, CO	Dove Creek, CO	Yes	FOX	No	235	1%
K15GU	LD	Denver, CO	Dove Creek, CO	Yes	NBC	No	242	1%
K19GB	LD	Denver, CO	Dove Creek, CO	Yes	CBS	No	235	1%
K23GF	LD	Denver, CO	Dove Creek, CO	Yes	PBS	No	235	1%

- Out-of-Market Stations on the Significantly Viewed Station List for Montezuma County, Colorado
 - None of the out-of-market stations received over the air in Montezuma County are on the Commission's list of significantly viewed broadcast stations.
- Out-of-Market Stations Carried By DBS
 - Both DISH and DIRECTV provide local-into-local service for the Albuquerque-Santa Fe DMA. Neither provider offers any Colorado stations as part of its service.
- Out-of-Market Stations Carried By Cable
 - Charter Communications is a cable MVPD provider in Montezuma County and also serves the communities of Dolores, Durango, Hermosa, and Mancos, Colorado.
 - Charter does not offer out-of-market broadcast stations as part of its service in this county.

2. In-State, In-Market Broadcast Stations Received in Montezuma County, Colorado

- In-State, In-Market Broadcast Stations Received Over the Air

Station	Type of Service	Station's Assigned DMA	City, State of License	In-State as to Montezuma County, CO?	Network Affiliation	Significantly viewed?	Population served by station in the County	% of County served by this station
KREZ-TV ¹²	DT	Albuquerque-Santa Fe, NM	Durango, CO	Yes	CBS, Get TV	No	313	1%
K09DM	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	ABC	No	23,240	91%
K17JJ	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	MeTV	No	16,308	64%
K13XH	LD	Albuquerque-Santa Fe, NM	Weber Canyon, CO	Yes	FOX	No	171	1%
K10OD	LD	Albuquerque-Santa Fe, NM	Weber Canyon, CO	Yes	ABC	No	171	1%
K11LP	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	NBC	No	23,257	91%
K05LI	LD	Albuquerque-Santa Fe, NM	Weber Canyon, CO	Yes	NBC	No	358	1%
K14JS	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	Religious	No	23,679	93%
K29GO	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	CBS	No	23,393	93%
K12QH	LD	Albuquerque-Santa Fe, NM	Delores, CO	Yes	PBS	No	1,291	5%
K02OU	LD	Albuquerque-Santa Fe, NM	Ismay Canyon, CO	Yes	CW	No	289	1%
K24CH	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	NBC	No	22,896	90%
K04ON	LD	Albuquerque-Santa Fe, NM	Weber Canyon, CO	Yes	CBS	No	358	1%
K18DR	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	Educational	No	22,983	90%
K10NY	LD	Albuquerque-Santa Fe, NM	Ismay Canyon, CO	Yes	ABC	No	287	1%
K04OO	LD	Albuquerque-Santa Fe, NM	Ismay Canyon,	Yes	CBS	No	289	1%

¹² KREZ-TV, Durango, Colorado, is a satellite and retransmits the programming of station KRQE-TV, Albuquerque, New Mexico. See KRQE-TV, <http://www.krqe.com/subindex/news/local/northwest> (last visited June 1, 2016).

Station	Type of Service	Station's Assigned DMA	City, State of License	In-State as to Montezuma County, CO?	Network Affiliation	Significantly viewed?	Population served by station in the County	% of County served by this station
			CO					
K41DE	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	PBS	No	22,062	86%
K19JA	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	PBS	No	1,633	6%
K04NK	LD	Albuquerque-Santa Fe, NM	Delores, CO	Yes	NBC	No	1,594	6%
K28EB	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	CBS	No	22,904	90%
K30HJ	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	PBS	No	23,379	92%
K13AT	LD	Albuquerque-Santa Fe, NM	Delores, CO	Yes	Religious	No	1,723	7%
K48NK	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	ION	No	22,469	88%
K23LH	LD	Albuquerque-Santa Fe, NM	Cortez, Co	Yes	FOX	No	1,633	6%
K02OG	LD	Albuquerque-Santa Fe, NM	Delores, CO	Yes	CW	No	1,463	6%
K02MB	LD	Albuquerque-Santa Fe, NM	Weber Canyon, CO	Yes	My Network TV	No	171	1%
K27IG	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	FOX	No	22,902	90%
K07UY	LD	Albuquerque-Santa Fe, NM	Cortez, Co	Yes	IND	No	23,248	91%
K22CU	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	CW	No	22,894	90%
K13XG	LD	Albuquerque-Santa Fe, NM	Ismay Canyon, CO	Yes	FOX	No	287	1%
K50IV	LD	Albuquerque-Santa Fe, NM	Cortez, Co	Yes	NBC	No	17,690	69%
K35CH	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	ABC	No	22,902	90%
K51DB	LD	Albuquerque-Santa Fe, NM	Cortez, Co	Yes	PBS	No	22,590	88%
K02OS	LD	Albuquerque-Santa Fe, NM	Weber Canyon, CO	Yes	CW	No	358	1%
K10MZ	LD	Albuquerque-Santa Fe, NM	Delores, Co	Yes	PBS	No	1,292	5%
K39EY	LD	Albuquerque-Santa Fe, NM	Cortez, Co	Yes	CBS	No	21,844	86%

Station	Type of Service	Station's Assigned DMA	City, State of License	In-State as to Montezuma County, CO?	Network Affiliation	Significantly viewed?	Population served by station in the County	% of County served by this station
K05JW	LD	Albuquerque-Santa Fe, NM	Ismay Canyon, CO	Yes	NBC	No	289	1%
K25LT	LD	Albuquerque-Santa Fe, NM	Cortez, Co	Yes	PBS	No	1,633	6%
K05GA	LD	Albuquerque-Santa Fe, NM	Delores, CO	Yes	ABC	No	1,439	6%
K26CI	LD	Albuquerque-Santa Fe, NM	Cortez, CO	Yes	My Network TV	No	22,896	90%

- DBS Carriage of In-State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Albuquerque-Santa Fe DMA. Neither provider offers Colorado broadcast stations as part of their service.
- Cable Carriage of In-State, In-Market Broadcast Stations
 - Charter Communications is a cable MVPD provider in Montezuma County and serves the communities of Dolores, Durango, Hermosa, and Mancos, Colorado.
 - TDS¹³ is a cable MVPD provider in Montezuma County and also serves the communities of Cortez, and Towaoc, counties in Colorado.

Station	Type of Service	Assigned DMA	City, State of License	Network Affiliation	In-state to Montezuma County, CO?	Significantly Viewed?	Charter Carriage?	TDS Carriage?
KRMU	DT	Albuquerque-Santa Fe, NM	Durango, CO	PBS	Yes	No	Yes	No
KREZ-TV	DT	Albuquerque-Santa Fe, NM	Durango, CO	CBS, Get TV	Yes	No	Yes	Yes

3. In-State Programming in Montezuma County, Colorado

- Local News Programming Received Over the Air
 - The following in-state stations provide news and information to Montezuma County and in the state of Colorado:
 - One in-state station, KRMU (PBS/Create/Viva), located in Durango, provides relevant local news and information to Montezuma County and in the state of Colorado. This station airs, *Rocky Mountain PBS*¹⁴ on all three multicasts stations, each with individual schedules of all day educational local and in-state programming.

¹³ TDS, <http://hellotds.com/tv/channel-lineups> (last visited June 1, 2016).

¹⁴ Rocky Mountain PBS, <http://www.rmpbs.org/home/> (last visited June 1, 2016).

II. *Denver, CO DMA:* Albany and Campbell Counties in Wyoming are assigned to the Denver DMA, ranked 17th, and based in the state of Colorado. The Denver DMA is also comprised of six Wyoming counties, 48 Colorado counties, and 14 Nebraska counties. This case study specifically considers Albany and Campbell counties, two of the Wyoming counties assigned to the Denver DMA.¹⁵

A. Albany County, Wyoming

1. Out-of-Market Broadcast Stations Received in Albany County, Wyoming:

- Out-of-Market Broadcast Stations Received Over the Air (OTA)
 - Albany County has a total population of 36,299. The following out-of-market, in-state broadcast stations, are received over the air:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Albany County, WY?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
KLWY	DT	Cheyenne, WY-Scottsbluff, NE	Cheyenne, WY	Yes	FOX, ABC	No	186	1%
KGWN	DT	Cheyenne, WY-Scottsbluff, NE	Cheyenne, WY	Yes	CBS, NBC CW	Yes	555	2%
K12FY	TX	Cheyenne, WY-Scottsbluff, NE	Big Laramie, WY	Yes	ABC	No	28,281	78%

¹⁵ Consumers residing in Albany, Campbell, and other affected Wyoming counties filed comments in this proceeding regarding their lack of Wyoming programming. *See, e.g.*, Pam Mathewson Comments (May 11, 2015); Bridget Hettgar Comments (May 13, 2015); Craig Blumenshine Comments (May 13, 2015); Celeste Colgan Comments (May 15, 2015); Ralph Horne Comments (May 18, 2015); Christine Warner Comments (May 18, 2015); Connie Baker Comments (May 21, 2015); Sweetwater County Democratic Party Comments (May 26, 2015); Peter Lang Comments (May 26, 2015); Tami Sorenson Comments (May 26, 2015); Cherie Longmuir Comments (May 26, 2015); Linda Valenti Comments (May 28, 2015); Tammy Au-France Comments (June 4, 2015); Kenneth Allison Comments (June 5, 2015); Dean and Linda Lebeda Comments (June 8, 2015); Holly Horton Comments (June 8, 2015); Joe Remick Comments (June 9, 2015); Julius and Erica Muschaweck Comments (June 10, 2015); Katie Peterson Comments (June 10, 2015); Paul Parmelly Comments (June 10, 2015); Walt Lashmett Comments (June 10, 2015); Jenny Williams Comments (June 10, 2015); Frances Tschacher Comments (June 10, 2015); Lee Tschacher Comments (June 10, 2015); Judith King Comments (June 10, 2015); Justin Gulley Comments (June 10, 2015); Algera and Dennis Jensen Comments (June 10, 2015); Dee Krejci Comments (June 10, 2015); C. Robb Comments (June 10, 2015); Lee Ann Stephenson Comments (June 11, 2015); Governor Matthew Mead Comments (June 11, 2015).

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Albany County, WY?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
K10FQ	TX	Cheyenne, WY-Scottsbluff, NE	Big Laramie, WY	Yes	CBS	No	28,327	78%
K19FX	LD	Cheyenne, WY-Scottsbluff, NE	Cheyenne, WY	Yes	CBS	No	34,768	96%
K03CR	TX	Cheyenne, WY-Scottsbluff, NE	Big Laramie, WY	Yes	NBC	No	32,686	90%
KXJB-LP	TX	Cheyenne, WY-Scottsbluff, NE	Laramie, WY	Yes	NBC	No	33,804	93%
KPAH-LP	TX	Cheyenne, WY-Scottsbluff, NE	Laramie, WY	Yes	Religious	No	32,603	90%

- Out-of-Market Stations on the Significantly Viewed Station List for Albany County, Wyoming

Station	City, State of License	Type of Service	Network Affiliation	Station's Assigned DMA
KGWN	Cheyenne, WY-	DT	CBS, NBC, CW	Cheyenne, WY-Scottsbluff, NE
KMGH-TV	Denver, CO	DT	ABC, Azteca, Weather & News	Denver, CO
KCNC-TV	Denver, CO	DT	CBS, Decades TV	Denver, CO
KUSA-TV	Denver, CO	DT	NBC, Justice TV, WeatherNation TV	Denver, CO

- Out-of-Market Stations Carried By DBS

- Both DISH and DIRECTV offer local into local service in the Denver DMA. Neither provider offers out-of-market stations as part of their service.

- Out-of-Market Stations Carried By Cable

- Charter Communications is the cable MVPD in Albany County. This cable provider also serves the community of Laramie, Wyoming. Charter offers the following out-of-market, in-state full power broadcast stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	Network Affiliation	In-state as to Albany County, WY?	Significantly Viewed?	Charter Carriage?
KTWO	DT	Cheyenne, WY-Scottsbluff, NE	Casper, WY	ABC	Yes	No	Yes
KCWY	DT	Cheyenne, WY-Scottsbluff, NE	Casper, WY	NBC	Yes	No	Yes
KCWC	DT	Cheyenne, WY-Scottsbluff, NE	Lander, WY	PBS	Yes	No	Yes

2. In-State, In-Market Broadcast Stations Received in Albany County, Wyoming:

- In-State, In-Market Broadcast Stations Received Over the Air

- Albany County has two in-market, in-state full power broadcast stations, KWYP (PBS), Laramie, WY, and KQCK (ABC/Mundomax), Cheyenne, WY, both assigned to the Denver DMA.

- DBS Carriage of In-State, In-Market Broadcast Stations

- Both DISH and DIRECTV offer local-into-local service in the Denver DMA. Neither provider offers Wyoming broadcast stations as part of their service.

- Cable Carriage of In-State, In-Market Broadcast Stations

- Charter does not offer Wyoming broadcast stations as part of its service.

3. In-State Local Programming in Albany County, Wyoming

- Local News Programming Received Over the Air

- The following in-state stations provide relevant local news and information, to Albany County and in the state of Wyoming:
 - KGWN (CBS/NBC/CW), located in Laramie, airs local news four times daily.
 - KWYP (PBS), located in Laramie, airs *Main Street Wyoming*, a daily series focusing on the communities and people of the state, and *Capitol Outlook*, a weekly program providing locally produced documentaries and interviews along with information on the state government.

B. Campbell County, Wyoming**1. Out-of-Market Broadcast Stations Received in Campbell County, Wyoming:**

- Out-of-Market Broadcast Stations Received Over the Air (OTA)
 - Campbell County has a total population of 46,133. The following out-of-market stations are received over the air in this county.

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Campbell County, WY?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
KSGW	DT	Rapid City, SD	Sheridan, WY	Yes	ABC, MeTV, This TV	No	5,732	12%
K28KM	LD	Rapid City, SD	Clareton, WY	Yes	CBS	No	701	2%

- Out-of-Market Stations on the Significantly Viewed Station List for Campbell County, Wyoming
 - According to the Significantly Viewed Station List, Campbell County has ninety percent cable coverage.¹⁶
 - The following two out-of-market broadcast stations are affected on the Significantly Viewed Station List for Campbell County in the communities of Gillette and Rock Springs, Wyoming:

Station	City, State of License	Type of Service	Network Affiliation	Station's Assigned DMA
KGWC-TV	Casper, WY	DT	ABC/CBS	Casper-Riverton, WY
KTWO-TV	Casper, WY	DT	ABC	Casper-Riverton, WY

- Out-of-Market Stations Carried By DBS
 - Both DISH and DIRECTV offer local into local service in the Denver DMA. Neither provider offers out-of-market stations as part of their service.

¹⁶ Significantly Viewed List, <http://www.fcc.gov/mb/>.

- Out-of-Market Stations Carried By Cable

- Charter Communications is the cable MVPD in Campbell County. This cable provider also serves the community of Gillette, Wyoming. Charter offers the following out-of-market, full power broadcast stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	Network Affiliation	In-state as to Campbell County, WY?	Significantly Viewed?	Charter Carriage?
KTWO	DT	Casper, WY	Casper, WY	ABC	Yes	No	Yes
KCWY	DT	Casper, WY	Casper, WY	NBC	Yes	No	Yes
KCWC	DT	Casper, WY	Lander, WY	PBS	Yes	No	Yes

2. In-State, In-Market Broadcast Stations Received in Campbell County, Wyoming

- In-State, In-Market, Broadcast Stations Received Over the Air

- Campbell County does not receive any in-market, in-state broadcast stations over the air.

- DBS Carriage of In-State, In-Market Broadcast Stations

- Both DISH and DIRECTV offer local-into-local service in the Denver DMA. Neither providers offer Wyoming broadcast stations as part of their service.

- Cable Carriage of In-Market, In-State Broadcast Stations

- Charter does not offer in-market Wyoming broadcast stations as part of its service.

3. In-State Local Programming in Campbell County, Wyoming

- Local News Programming Received Over the Air

- The following in-state stations provide relevant local news and information to Campbell County and in the state of Wyoming:
 - KSGW (ABC), located in Sheridan, Wyoming, airs local news four times daily.
 - KCWY (NBC), located in Casper, KGWN (CBS), and KTWO (ABC), both located in Cheyenne, Wyoming, airs over six hours of local news daily. All three stations air the local program, Today in Wyoming. This daily program discusses local, statewide and national news events, along with updates on local sports and weather.

III. Greenville-Spartanburg-Anderson, SC-Ashville, NC DMA: Stephens County, Georgia is assigned to the Greenville-Spartanburg-Anderson, SC-Ashville, NC DMA, ranked 37th, and is based in South Carolina. The Greenville DMA is also comprised of 14 North Carolina Counties, ten South Carolina Counties, and four Georgia Counties. The total county population in Stephens County, Georgia, is 26,175. This case study considers Stephens County.

A. Stephens County, Georgia

1. Out-of-Market Broadcast Stations Received in Stephens County, GA

• Out-of-Market Broadcast Stations Received Over the Air (OTA)

Station	Type of Service	Assigned DMA	City, State of License	In-state as to Stephens County, GA?	Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WDWW-LP	TX	Atlanta, GA	Cleveland, GA	Yes	IND	No	1,851	7%
WYFF	DT	Greenville, NC	Greenville, SC	No	NBC, Movies TV	Yes	26,433	101%

• Out-of-Market Station Carried By DBS

- Both DISH and DIRECTV offer local-into-local service in the Greenville-Spartanburg DMA. Neither provider offers out-of-market stations as part of their service.

• Out-of-Market Stations Carried By Cable

- TruVista Communications¹⁷ is the cable MVPD in Stephens County also serves the following communities: Franklin, Royston, Toccoa, and Toccoa Falls, Georgia. This cable provider offers the following out-of-market stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Stephens County, GA?	Network Affiliation	Significantly Viewed?	TruVista Carriage?
WSB-TV	DT	Atlanta, GA	Atlanta, GA	Yes	ABC, MeTV	No	Yes
WAGA	DT	Atlanta, GA	Atlanta, GA	Yes	FOX, Movies TV	No	Yes
WGTV	DT	Atlanta, GA	Atlanta, GA	Yes	PBS	No	Yes
WXIA-TV	DT	Atlanta, GA	Atlanta, GA	Yes	NBC, Justice TV, WeatherNation	No	Yes

¹⁷ TruVista Communications, http://chester.truvista.net/tv/listing_grid.php?page=grid (last visited June 1, 2016).

- Out-of-Market Stations on the Significantly Viewed Station List for Stephens County, Georgia
 - Stephens County does not receive out-of-market significantly viewed broadcast stations.

2. In-State, In-Market Broadcast Stations Received in Stephens County, Georgia

- In-State, In-Market Broadcast Stations Received Over the Air

Station	Type of Service	Assigned DMA	City, State of License	In-state as to Stephens County, GA?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WGTA	DT	Greenville-Spartanburg	Toccoa, GA	Yes	IND	No	26,433	101%
W08EG	LD	Greenville-Spartanburg	Toccoa, GA	Yes	PBS	No	26,306	101%

- DBS Carriage of In-State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Greenville-Spartanburg DMA. Neither provider offers Georgia broadcast stations as part of their service.
- Cable Carriage of In-State, In-Market Broadcast Stations
 - TruVista Communications¹⁸ is the cable MVPD in Stephens County also serves the following communities: Franklin, Royston, Toccoa, and Toccoa Falls, Georgia.
 - This cable providers does not offer in-market, broadcast stations in this county.

3. In-State Local Programming in Stephens County, Georgia

- Local News Programming Received Over the Air
 - The following in-state stations provide relevant local news and information to Stephens County and in the state of Georgia:
 - WSB-TV (ABC), located in Atlanta, airs twelve hours of daily local news.
 - WXIA (NBC), located in Atlanta, airs over 5 hours of daily local news.
 - WAGA (FOX), located in Atlanta, airs twelve 12 hours of local news daily Monday through Friday. Other local programming on this station include, the *Georgia Farm Monitor*, a weekly syndicated agriculture news program broadcasting throughout the state of Georgia. *The Georgia Gang*, a weekly Georgia public affairs and politics program and *Lawmakers*, a weekly program featuring coverage of the Georgia General Assembly and airs every night the Assembly convenes for the duration of a legislative session.

¹⁸ TruVista Communications, http://chester.truvista.net/tv/listing_grid.php?page=grid (last visited June 1, 2016).

- W08EG (PBS) located in Toccoa, is a translator that rebroadcasts WGTV (PBS) Atlanta, Georgia. Its programming includes, *Georgia Traveler* featuring a TV & web series that explores the state's most beautiful, exciting, and unique treasures. This fast-paced program delivers a perfect mix of fun, history, and pure visual entertainment. In addition, *Georgia Outdoors* featuring an amazing view of all that Georgia has to offer through spectacular photography and narrative storytelling that showcases wildlife, plants, and other aspects of the state's natural beauty.

IV. New York, NY DMA: Hunterdon County, New Jersey is assigned to the New York DMA, ranked 1st, and based in the state of New York. The New York DMA is also comprised of one Pennsylvania County, 14 New Jersey counties and 15 New York Counties. The total population in Hunterdon County, New Jersey is 128,349. This case study considers Hunterdon County.

A. Hunterdon County, New Jersey

1. Out-of-Market Broadcast Stations Received in Hunterdon County, New Jersey

- Out-of-Market Broadcast Stations Received Over the Air (OTA):

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Hunterdon County, NJ?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WNJT	DT	Philadelphia	Trenton, NJ	Yes	PBS	No	125,590	98%
WBPH-TV	DT	Philadelphia	Bethlehem, PA	No	IND	No	125,960	98%
WWSI	DT	Philadelphia	Atlantic City, NJ	Yes	Telemundo	No	6,730	5%
WLVT-TV	DT	Philadelphia	Allentown, PA	No	PBS	No	115,705	90%
KJWP	DT	Philadelphia	Wilmington, DE	No	NBC, MeTV	No	104,647	82%
KYW-TV	DT	Philadelphia	Philadelphia, PA	No	CBS, IND-Spanish, Decades TV	Yes	125,347	98%
WTFX-TV	DT	Philadelphia	Philadelphia, PA	No	FOX, Movies TV, MondoMax	Yes	111,234	87%
WNJS	DT	Philadelphia	Camden, NJ	Yes	PBS	No	12,025	9%
WPHL-TV	DT	Philadelphia	Philadelphia, PA	No	MNT, Antenna TV, This TV	No	123,461	96%
WPVI-TV	DT	Philadelphia	Philadelphia, PA	No	ABC, Live Well Network	Yes	126,154	98%
WPSG	DT	Philadelphia	Philadelphia, PA	No	CW	Yes	115,216	90%
Station	Type of Service	Station's Assigned	City, State of License	In-state as to	Network Affiliation	Significantly Viewed?	Population Served by	% of county

		DMA		Hunterdon County, NJ?			station in the County	served by this station
WHYY-TV	DT	Philadelphia	Wilmington, DE	No	PBS	No	121,362	95%
WGTW-TV	DT	Philadelphia	Burlington, NJ	Yes	Trinity Broadcast Network	No	65,795	51%
WFMZ-TV	DT	Philadelphia	Allentown, PA	No	IND	No	121,002	94%
WBRE-TV	DT	Wilkes-Barre	Wilkes-Barre, PA	Yes	NBC	No	19,933	16%
WTVE	DT	Philadelphia	Reading, PA	No	IND	No	38,931	30%
WPPX-TV	DT	Philadelphia	Wilmington, DE	No	ION, ION Life, qubo QVC, HSN	No	66,315	52%
WYOU	DT	Wilkes-Barre	Scranton, PA	No	CBS	No	19,220	15%
WVIA-TV	DT	Wilkes-Barre	Scranton, PA	No	PBS	No	11,093	9%
WACP	DT	Philadelphia	Atlantic City, NJ	Yes	IND	No	92,155	72%
WOLF-TV	DT	Wilkes-Barre	Hazleton, PA	No	FOX, MNT, CW	No	9,690	8%
WUVP	DT	Philadelphia	Vineland, NJ	Yes	Univision, UniMas, Bounce TV, Get TV	No	113,657	89%
WNEP-TV	DT	Wilkes-Barre	Scranton, PA	No	ABC, Antenna TV	No	11,565	9%
WCAU	DT	Philadelphia	Philadelphia, PA	No	NBC, Cozi TV	Yes	121,013	94%
WTSD-LP	TX	Philadelphia	Philadelphia, PA	No	IND	No	8,732	7%

- Out-of-Market Stations on the Significantly Viewed Station List for Hunterdon County, New Jersey

Station	City, State of License	Type of Service	Network Affiliation	Station's Assigned DMA
KYW-TV	Philadelphia, PA	DT	CBS, Decades TV	Philadelphia
WPVI-TV	Philadelphia, PA	DT	ABC, Live Well Network	Philadelphia
WCAU	Philadelphia, PA	DT	NBC, COZI TV	Philadelphia
WTFX-TV	Philadelphia, PA	DT	FOX, Mundomax, Movies! TV, Buzzr TV	Philadelphia
WPSG	Philadelphia, PA	DT	CW	Philadelphia

- Out-of-Market Stations Carried By DBS

- Both DISH and DIRECTV offer local-into-local service in the New York DMA. Neither provider offers out-of-market broadcast stations in this market.

- Out-of-Market Stations Carried By Cable

- Service Electric Cable TV of Hunterdon, Inc. ("SECTV") is the cable provider in Hunterdon County¹⁹. SECTV carries the following out-of-market broadcast stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Hunterdon County, NJ?	Network Affiliation	Significantly Viewed?	SECTV Carriage?
KYW-TV	DT	Philadelphia	Philadelphia, PA	No	CBS, Decades TV	Yes	Yes
WBPH-TV	DT	Philadelphia	Bethlehem, PA	No	IND	No	Yes
WCAU	DT	Philadelphia	Philadelphia, PA	No	NBC, COZI TV	Yes	Yes
WFMZ-TV	DT	Philadelphia	Allentown, PA	No	IND, Retro TV	No	Yes
WHYY-TV	DT	Philadelphia	Wilmington, DE	No	PBS	No	Yes
WPHL-TV	DT	Philadelphia	Philadelphia, PA	No	MNT, Antenna TV, This TV	No	Yes
WPSG	DT	Philadelphia	Philadelphia, PA	No	CW	Yes	Yes
WPVI-TV	DT	Philadelphia	Philadelphia, PA	No	ABC, Live Well Network	Yes	Yes
WTFX-TV	DT	Philadelphia	Philadelphia, PA	No	FOX, Movies! TV, Buzzr TV	Yes	Yes

¹⁹ Service Electric Cable TV of Hunterdon, Inc., <http://www.sectv.com/Web/aspWhatsOn.aspx?strSystem=HU> (last visited June 1, 2016).

2. In-State, In-Market Broadcast Stations Received in Hunterdon County, New Jersey

- In-State, In-Market Broadcast Stations Received Over the Air

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Hunterdon County, NJ?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WNET-TV	DT	New York	Newark, NJ	Yes	PBS	No	98,751	77%
WNJN	DT	New York	Montclair, NJ	Yes	PBS	No	72,146	56%
WNJB	DT	New York	New Brunswick, NJ	Yes	PBS	No	121,323	95%
WNJU	DT	New York	Linden, NJ	Yes	Telemundo	No	73,824	58%
WWOR-TV	DT	New York	Secaucus, NJ	Yes	FOX, MNT	Yes	93,970	73%
WXTV-TV	DT	New York	Paterson, NJ	Yes	Univision, UniMas, Bounce TV	No	101,807	79%
WMBC-TV	DT	New York	Newton, NJ	Yes	Independent-Asian, Azteca America	No	103,288	80%
WNYJ-TV	DT	New York	West Milford, NJ	Yes	Independent-Asian	No	2,837	2%
WFUT	DT	New York	Newark, NJ	Yes	UniMas, Get TV	No	77,953	61%

- DBS Carriage of In State, In-Market Broadcast Stations

- Both DISH and DIRECTV offer local-into-local service in the New York DMA. DISH and DIRECTV carry the following in-state, in-market, broadcast stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Hunterdon County, NJ?	Network Affiliation	DIRECTV Carriage?	DISH Carriage?
WNET	DT	New York	Newark, NJ	Yes	PBS	Yes	Yes
WNJB	DT	New York	New Brunswick, NJ	Yes	PBS	No	Yes
WWOR-TV	DT	New York	Secaucus, NJ	Yes	FOX, MNT	Yes	Yes
WXTV	DT	New York	Paterson, NJ	Yes	Univision, UniMas, Bounce TV	Yes	Yes
WJLP	DT	New York	Middletown, NJ	Yes	MeTV	No	Yes
WNJU	DT	New York	Linden, NJ	Yes	Telemundo	Yes	Yes

WMBC	DT	New York	Newton, NJ	Yes	Independent-Asian, Azteca	Yes	Yes
WNYJ	DT	New York	West Milford, NJ	Yes	Independent-Asian	Yes	Yes
WFUT	DT	New York	Newark, NJ	Yes	UniMas, Get TV	Yes	No

- Cable Carriage of In State, In-Market Broadcast Stations

- Service Electric Cable TV of Hunterdon, Inc. is the cable MVPD in Hunterdon County. This cable provider also serves the following communities: Warren, Alexandria Township, Alpha Borough, Bloomsburg, Frenchtown Borough, Greenwich Township, Harmony Township, Holland Township, Kingwood Township, Lopatcong Township, Milford Borough, Philipsburg and Pohatcong Township, New Jersey.
- This cable provider carries two in-market, in-state broadcast stations: WWOR (FOX/My Network TV), Secaucus, New Jersey, and WXTV (Univision/Bounce TV), Paterson, New Jersey, both assigned to the New York DMA.

3. In-State Local Programming in Hunterdon County, New Jersey

- Local News Programming Received Over the Air

- The following in-state stations provide relevant local news and information, to Hunterdon County and in the state of New Jersey:
- In Hunterdon County, these five noncommercial stations: WNET (PBS), Montclair, New Jersey; WNJN (PBS), Newark, New Jersey; WNJB (PBS), New Brunswick, New Jersey; WNJS (PBS), Camden, New Jersey, and WNJT (PBS), Trenton, New Jersey, all air locally focused programming such as:
 - NJTV News and Metrofocus, both programs daily airs coverage of local and state issues impacting New Jersey, Connecticut, and New York
 - One on One with Steve Adubato, a locally produced talk show discussing compelling, real life stories and features political leaders, CEOs, television personalities, professors, artists and educational innovators who each share their experiences and accomplishments throughout the region.
 - Classroom Close-Up New Jersey, a weekly program providing insight into innovative projects in the New Jersey school system.
 - New Jersey Capital Report, a program aired daily that examines important political, social, and cultural issues affecting the people of New Jersey through in-depth conversations with the state's top legislative leaders.
 - Caucus New Jersey, a daily program featuring locally produced documentaries and interviews.
 - Reporters Roundtable, a weekly program that gives an in-depth examination of the issues reported on the front pages of the state's leading newspapers by the journalists who report the news.

V. Pittsburgh DMA: Garrett County Maryland is assigned to the Pittsburgh DMA, ranked 23rd, and based in the state of Pennsylvania. The Pittsburgh DMA is also comprised of 13 Pennsylvania counties

and two West Virginia counties. The total population in Garrett County is 30,097. This case study considers Garrett County.²⁰

A. Garrett County, Maryland

1. Out-of-Market Broadcast Stations Received in Garrett County, Maryland

- Out-of-Market Broadcast Stations Received Over the Air (OTA):

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Garrett County, MD?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WHAG-TV	DT	Washington, DC	Hagerstown, MD	No	NBC	No	3,376	11%
WVPY	DT	Washington, DC	Front Royal, VA	No	PBS	No	890	3%
WWPX-TV	DT	Washington, DC	Martinsburg, WV	No	ION, ION Life, qubo QVC, HSN	No	2,805	9%
WWPB	DT	Washington, DC	Hagerstown, MD	Yes	PBS	No	1,713	6%
WWCP-TV	DT	Johnstown	Johnstown, PA	No	FOX, ABC	Yes	14,749	49%
WJAC-TV	DT	Johnstown	Johnstown, PA	No	NBC, MeTV, Comet TV	Yes	8,807	29%
WVFX	DT	Clarksburg	Clarksburg, WV	No	FOX, CW	No	2,997	10%
WBOY-TV	DT	Clarksburg	Clarksburg, WV	No	NBC, ABC	No	1,0707	36%
WDTV	DT	Clarksburg	Weston, WV	No	CBS, Weather Network	No	20,366	68%
W41DK	LD	Washington, DC	Keyser, WV	No	PBS	No	18,905	63%
W23DR	LD	Washington, DC	Romney, WV	No	PBS	No	5,275	18%

Station	Type of Service	Station's Assigned	City, State of License	In-state as to Garrett	Network Affiliation	Significantly Viewed?	Population Served by station in	% of county served
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²⁰ Consumers residing in Garrett County filed comments in this proceeding regarding their lack of Maryland programming. *See, e.g.*, Richard Bolt Comments (May 13, 2015), Letters from the Board of the Garrett County Commissioners (May 12, 2015) to Lawrence Unger, Maryland Public TV; Mark Burdett, WUSA-TV; Duffy Dyer, WTTG-TV; Jackie Bradford, WRC-TV; Dan Mellon, WNDC-TV; Bill Hooper, WMAR-TV; Jay Newman, WJZ-TV; Dan Joerres, WBAL-TV; William Sanshane, WBFF-TV.

		DMA		County, MD?			the County	by this station
W43BP	TX	Washington, DC	Cresaptown, MD	Yes	TBN	No	268	1%

- Out-of-Market Stations Carried By DBS

- Both DISH and DIRECTV offer local-into-local service in the Pittsburgh DMA. Neither provider offers out-of-market stations as part of their service.

- Out-of-Market Broadcast Stations Carried By Cable

Station	Type of Service	Assigned DMA	City, State of License	In-state as to Garrett County, MD?	Network Affiliation	Significantly Viewed?	Shentel Carriage?	Somerfield Carriage?
WDTV	DT	Clarksburg, WV	Weston, WV	No	CBS, Weather Network	No	Yes	No
WWCP-TV	DT	Johnstown, PA	Johnstown, PA	No	FOX, ABC	Yes	No	Yes
WATM	DT	Johnstown, PA	Altoona, PA	No	ABC, FOX, Antenna TV, This TV	No	No	Yes

- Out-of-Market Stations on the Significantly Viewed Station List for Garrett County, Maryland

Station	City, State of License	Type of Service	Network Affiliation	Station's Assigned DMA
WJAC-TV	Johnstown, PA	DT	NBC/MeTV	Johnstown, PA
WWCP-TV	Johnstown, PA	DT	FOX/ABC	Johnstown, PA

2. In-State, In-Market Broadcast Stations Received in Garrett County, Maryland

- In-State, In-Market Broadcast Stations Received Over the Air

- Garrett County receives one in-state full-power broadcast station, WGPT-TV (PBS), Oakland, MD, assigned to the Pittsburgh DMA.

- DBS Carriage of In-State, In-Market Broadcast Stations

- Both DISH and DIRECTV offer local-into-local service in the Pittsburgh DMA. Neither provider offers Maryland broadcast stations as part of their service.

- Cable Carriage of In-State, In-Market Broadcast Stations

- Shentel is a cable MVPD in Garrett County and serves the following communities: Deep Creek, Deer Park, Gorman, Kitzmiller, Loch Lynn Heights, Mountain Lake Park, and Oakland, Maryland. In West Virginia, Shentel serves Bayard, Blaine, Elk Garden, Gorman, Grant County and Mineral County.
- Somerfield Cable is also a cable MVPD in Garrett County and serves the following communities: Accident (unincorporated areas), Friendsville (unincorporated areas), Grantsville (unincorporated areas), in Maryland. In Pennsylvania, Somerfield Cable serves Addison and Addison Township.
- Both cable providers offer the following in-state, in-market broadcast station:

Station	Type of Service	Assigned DMA	City, State of License	In-state as to Garrett County, MD?	Network Affiliation	Significantly Viewed?	Shentel Carriage?	Somerfield Carriage?
WGPT	DT	Pittsburgh	Oakland, MD	Yes	PBS	No	Yes	Yes

3. In-State Local Programming in Garrett County, Maryland

- Local News Programming Received Over the Air

- The following stations provide relevant local news and information to Garrett County and in the state of Maryland:
 - WHAG (NBC), located in Hagerstown, airs over four hours of local news daily, Monday through Friday.
 - Both WWPB (PBS), located in Hagerstown, and WGPT-TV (PBS), Oakland, carry local programming such as, *State Circle*, a weekly program providing in-depth analysis of major issues and pending bills in the state of Maryland, and *Maryland Farm* and *Harvest*, a weekly program that educates viewers and tells the stories of the agricultural industry in the state.

VI. Providence, RI-New Bedford, MA DMA: Bristol County Massachusetts is assigned to the Providence DMA, based in Rhode Island. Bristol County is the only Massachusetts County assigned to the Providence, RI-New Bedford, MA DMA. The Providence, RI-New Bedford, MA DMA is also comprised of 5 Rhode Island Counties. Bristol County has a total population of 548,245. This case study considers Bristol County.²¹

²¹ Consumers residing in Bristol County filed comments in this proceeding regarding their lack of Massachusetts programming. *See, e.g.*, Tim Brastow Comments (March 24, 2015); Kyle Ramie Comments (May 6, 2015); Jerome Gibbs Comments (June 2, 2015).

A. Bristol County, Massachusetts**1. Out-of-Market Broadcast Stations Received in Bristol County, Massachusetts**• Out-of-Market Broadcast Stations Received Over the Air (OTA)

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Bristol County, MA?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WYDN	DT	Boston, MA	Worcester, MA	Yes	Daystar TV	No	274,971	50%
WUNI	DT	Boston, MA	Worcester, MA	Yes	Univision, LATV Network	No	456,575	83%
WWDP	DT	Boston, MA	Norwell, MA	Yes	Shopping Networks	No	555,224	101%
WGBX	DT	Boston, MA	Boston, MA	Yes	PBS	No	555,224	101%
WBZ-TV	DT	Boston, MA	Boston, MA	Yes	CBS, Decades TV	Yes	555,224	101%
WCVB-TV	DT	Boston, MA	Boston, MA	Yes	ABC, MeTV	Yes	555,035	101%
WFXT	DT	Boston, MA	Boston, MA	Yes	FOX, Movies TV	No	554,726	101%
WBPX-TV	DT	Boston, MA	Boston, MA	Yes	ION, ION Life, qubo, HSN, QVC	No	530,703	97%
WHDH	DT	Boston, MA	Boston, MA	Yes	NBC, This TV	Yes	553,842	101%
WSBK-TV	DT	Boston, MA	Boston, MA	Yes	My Network TV	Yes	553,170	101%
WGBH	DT	Boston, MA	Boston, MA	Yes	PBS	No	555,420	101%
WDPX	DT	Boston, MA	Vineyard Haven, MA	Yes	ION, ION Life, qubo, HSN, QVC	No	353,674	65%
WUTF-DT	DT	Boston, MA	Marlborough, MA	Yes	UniMas, Bounce TV, TV, Get TV	No	472,101	86%
WMFP	DT	Boston, MA	Lawrence, MA	Yes	IND	Yes	513,886	94%
WLVI	DT	Boston, MA	Cambridge, MA	Yes	CW, Zuus Country	Yes	548,285	101%
WHDT-LD	LD	Boston, MA	Boston, MA	Yes	IND	No	7,201	1%
WFXZ-CD	DC	Boston, MA	Boston, MA	Yes	Mundomax Religious Azteca	No	231,232	42%
Station	Type of	Station's Assigned	City, State	In-state as to	Network	Significantly	Population Served by	% of county

	Service	DMA	of License	Bristol County, MA?	Affiliation	Viewed?	station in the County	served by this station
WHPX	DT	Hartford, CT	New London, CT	No	ION, ION Life, qubo, HSN, QVC	No	214,764	39%

- Out-of-Market Stations Carried By DBS

- Both DISH and DIRECTV offer local-into-local service in the Providence DMA. Neither provider offers out-of-market stations as part of their service.

- Out-of-Market Stations Carried By Cable

- Comcast is the cable MVPD in Bristol County and serves the following communities: Acushnet, Assonet, Berkley, Dartmouth, Fairhaven, Fall River, Freetown, Lakeville, Marion, Mattapoisett, New Bedford, Plymouth, Rochester and Wareham, Massachusetts.
- Verizon is the telephone MVPD in Bristol County. The following stations are offered by both providers:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Bristol County	Network Affiliation	Significantly Viewed?	Comcast Carriage?	Verizon Carriage?
WHDT-LD	LD	Boston, MA	Boston, MA	Yes	IND	No	No	Yes
WUNI	DT	Boston, MA	Worcester, MA	Yes	Univision, LATV Network	No	Yes	Yes
WLVI	DT	Boston, MA	Cambridge, MA	Yes	CW, Zuus Country	Yes	Yes	Yes
WGBX	DT	Boston, MA	Boston, MA	Yes	PBS	No	Yes	Yes
WBZ-TV	DT	Boston, MA	Boston, MA	Yes	CBS, Decades TV	Yes	Yes	Yes
WCVB-TV	DT	Boston, MA	Boston, MA	Yes	ABC, MeTV	Yes	Yes	Yes
WBPX-TV	DT	Boston, MA	Boston, MA	Yes	ION, ION Life, qubo, HSN, QVC	No	Yes	Yes
WGBH-TV	DT	Boston, MA	Boston, MA	Yes	PBS	No	Yes	Yes
WFXT	DT	Boston, MA	Boston, MA	Yes	FOX, Movies TV	No	Yes	No
WHDH	DT	Boston, MA	Boston, MA	Yes	NBC, This TV	Yes	Yes	Yes
Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Bristol	Network Affiliation	Significantly Viewed?	Comcast Carriage?	Verizon Carriage?

				County				
WSBK-TV	DT	Boston, MA	Boston, MA	Yes	My Network TV	Yes	Yes	No

- Out-of-Market Stations on the Significantly Viewed Station List for Bristol County, Massachusetts

Station	City, State of License	Type of Service	Network Affiliation	Station's Assigned DMA
WBZ-TV	Boston, MA	DT	CBS, Decades TV	Boston, MA
WCVB-TV	Boston, MA	DT	ABC, MeTV	Boston, MA
WHDH-TV	Boston, MA	DT	NBC, This TV	Boston, MA
WSBK-TV	Boston, MA	DT	My Network TV	Boston, MA
WLVI-TV	Boston, MA	DT	CW, Zuus Country	Boston, MA

2. In-State, In-Market Broadcast Stations Received in Bristol County, Massachusetts

- In-State, In-Market Broadcast Stations Received Over the Air
 - Bristol County receives two in-market, in-state television stations, WLNE (ABC) New Bedford, MA and WLWC (CW) New Bedford, MA.
- DBS Carriage of In-State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Providence DMA.
 - Both providers offer WLNE (ABC) of New Bedford, MA and WLWC (CW) of New Bedford, MA, assigned to the Providence, RI-New Bedford, MA DMA.

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Bristol County, MA?	Network Affiliation	DIRECTV Carriage?	DISH Carriage?
WLNE	DT	Providence, RI	New Bedford, MA	Yes	PBS	Yes	Yes
WLWC	DT	Providence, RI	New Bedford, MA	Yes	PBS	Yes	Yes

- Cable Carriage of In-State, In-Market Broadcast Stations
 - Comcast is the cable MVPD in Bristol County and serves the following communities: Acushnet, Assonet, Berkley, Dartmouth, Fairhaven, Fall River, Freetown, Lakeville, Marion, Mattapoisett, New Bedford, Plymouth, Rochester and Wareham, Massachusetts.
 - Comcast offers the following in-market, in-state stations: WLWC-TV (CW), New Bedford, MA and WLNE-TV (ABC), New Bedford, MA assigned to the Providence, RI-New Bedford, MA DMA.
 - Verizon is the telephone MVPD in Bristol County and carries the following in-market, in-state stations: WLNE-TV (ABC), WLWC-TV (CW), assigned to the Providence, RI-New Bedford, DMA.

3. In-State Local Programming in Bristol County, Massachusetts

- Local News Programming Received Over the Air
 - The following in-state broadcast stations provide relevant local news and information to Bristol County and in the state of Massachusetts:
 - WCVB-TV (ABC), located in Boston, airs over eight hours of local news daily, as well as a weekly local program, *On the Record* and *Matter of Fact with Fernando Espuelas*. These weekly programs offer analysis of political and socioeconomic issues in America and includes interviews with decision makers and people who influence policy in the state.
 - WFXT (FOX), located in Boston, airs over eight hours of local news daily.
 - WHDH (NBC), located in Boston, airs seven hours of local news, Monday through Friday.
 - WBZ-TV (CBS), located in Boston, airs five hours of local news, Monday through Friday.
 - WLNE-TV (ABC), located in New Bedford, airs over three hours of daily local news, Monday through Friday.
 - WLVI (CW), located in Cambridge, and WSBK-TV (IND), located in Boston, both air an hour of local news coverage, Monday through Friday.
 - WGBX-TV (PBS), and WGBH-TV (PBS), both located in Boston, air locally focused programming such as, *Greater Boston*, a daily news program with a local perspective.

VII. Rapid City, SD DMA: Sheridan County, Wyoming is assigned to the Rapid City, South Dakota, DMA, ranked 171st, and based in the state of South Dakota. The Rapid City DMA is also comprised of 13 South Dakota counties, one Montana County, and one Nebraska County. The total population in Garrett County is 29,116. This case study considers Sheridan County.

A. Sheridan County, Wyoming

1. Out-of-Market Broadcast Stations Received in Sheridan County, Wyoming

- Out-of-Market Broadcast Stations Received Over the Air (OTA):
 - Sheridan County does not receive out-of-market broadcast stations.
- Out-of-Market Stations on the Significantly Viewed Stations List for Sheridan County, Wyoming

Station	Type of Service	City, State of License	Network Affiliation	Station's Assigned DMA
KTWO-TV	DT	Casper, WY	ABC	Casper-Riverton, WY
KULR-TV	DT	Billings, MT	NBC, Weather Network	Billings, MT
KTVQ	DT	Billings, MT	CBS, CW	Billings, MT

- Out-of-Market Stations Carried By DBS
 - Both DISH and DIRECTV offer local-into-local service in the Rapid City, SD DMA. Neither provider offers out-of-market broadcast stations in this county.

- Out-of-Market Stations Carried By Cable

- Charter Communications is the cable MVPD for this County, serving two communities the city of Sheridan, and Sheridan County, Wyoming. This cable provider offers the following out-of-market stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-State as to Sheridan County, WY?	Network Affiliation	Significantly Viewed?	Charter Carriage?
KCWC	DT	Casper-Riverton, WY	Lander, WY	Yes	PBS	No	Yes
KTWO	DT	Casper-Riverton, WY	Casper, WY	Yes	ABC	Yes	Yes
KULR	DT	Billings, MT	Billings, MT	No	NBC, Weather Network	Yes	Yes
KTVQ	DT	Billings, MT	Billings, MT	No	CBS, CW	Yes	Yes

2. In-State, In-Market Broadcast Stations in Sheridan County, Wyoming

- In-State, In-Market Broadcast Stations Received Over the Air

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Sheridan County, WY?	Network Affiliation	Significantly Viewed?	Population Served by Station in the County	% of County served by this station
KSGW-TV	DT	Rapid City, SD	Sheridan, WY	Yes	ABC, MeTV, This TV	No	29,105	100%
K09XK	LD	Rapid City, SD	Sheridan, WY	Yes	CBS	No	27,845	96%
K26LW	LD	Rapid City, SD	Sheridan, WY	Yes	ABC	No	28,036	96%
K15HK	LD	Rapid City, SD	Sheridan, WY	Yes	PBS	No	25,993	89%

- DBS Carriage of In-State, In-Market Broadcast Stations

- Both DISH and DIRECTV offer local-into-local service in the Rapid City, SD DMA. Neither provider offers Wyoming stations as part of their service.

- Cable Carriage of In-State, In-Market Broadcast Stations
 - Charter Communications is the cable MVPD in Sheridan County.

Station	Type of Service	Station's Assigned DMA	City, State of License	In-State as to Sheridan County, WY?	Network Affiliation	Significantly Viewed?	Charter Carriage?
KSGW-TV	DT	Rapid City, SD	Sheridan, WY	Yes	ABC	No	Yes
KEVN	DT	Rapid City, SD	Rapid City, WY	Yes	ABC	No	Yes
KSWY-LP	TX	Rapid City, SD	Sheridan, WY	Yes	NBC	No	Yes

3. In-State Local Programming in Sheridan County, Wyoming

- Local News Programming Received Over the Air
 - The following in-state stations provide relevant local news and information to Sheridan County and in the state of Wyoming:
 - KTWO-TV (ABC), located in Casper, airs two hours of local news daily. In addition, this station airs *Good Morning Wyoming*, a daily locally focused program featuring cultural, information and legislative news in Wyoming.
 - KCWC (PBS), located in Lander, this station airs *Main Street Wyoming*, a daily series focusing on the communities and people of the state, and *Capitol Outlook*, a weekly program providing locally produced documentaries and interviews along with information on the state government.
 - KOTA (ABC/FOX), located in Rapid City, has four multicast stations and airs over 4 hours of daily local and regional news on each. These stations also airs *Good Morning KOTA Territory*, a daily morning show discussing local and regional news.

VIII. Salisbury, MD DMA: Sussex County is assigned to the Salisbury DMA, based in Maryland. Sussex County is the only Delaware County assigned to the Salisbury DMA. The Salisbury DMA is also comprised of four Maryland Counties. The total county population in Sussex County is 197,145. This case study considers Sussex County.

A. Sussex County, Delaware**1. Out-of-Market Broadcast Stations Received in Sussex County, Delaware:**

- Out-of-Market Broadcast Stations Received Over the Air (OTA)

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Sussex County, DE?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WMDE	DT	Philadelphia, PA	Dover, DE	Yes	Soul of the South TV	No	166,097	84%
WJZ-TV	DT	Baltimore, MD	Baltimore, MD	No	CBS, Decades TV No	Yes	1,575	1%
WMGM-TV	DT	Philadelphia, PA	Wildwood, DE	Yes	NBC, Soul of the South TV	No	73,596	37%
WBAL-TV	DT	Baltimore, MD	Baltimore, MD	No	NBC, MeTV	Yes	1,344	1%

- Out-of-Market Stations Carried By DBS

- Both DISH and DIRECTV offer local-into-local service in the Salisbury DMA. Neither provider offers out-of-market broadcast stations as part of their service.

- Out-of-Market Stations Carried By Cable

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Sussex County, DE?	Network Affiliation	Significantly Viewed?	Mediacom Carriage?	Comcast Carriage?
WBAL-TV	DT	Baltimore, MD	Baltimore, MD	No	NBC, MeTV	Yes	Yes	No
WMPT	DT	Baltimore, MD	Annapolis, MD	No	PBS	No	No	Yes

- Out-of-Market Stations on the Significantly Viewed Stations List for Sussex County, Delaware

Station	Type of Service	City, State of License	Network Affiliation	Station's Assigned DMA
WMAR-TV	DT	Baltimore, MD	ABC, Bounce TV, Laff TV	Baltimore, MD
WBAL-TV	DT	Baltimore, MD	NBC, MeTV	Baltimore, MD
WJZ-TV	DT	Baltimore, MD	CBS, Decades TV	Baltimore, MD
WTTG	DT	Washington, DC	FOX	Washington, DC

2. In-Market, In-State Broadcast Stations in Sussex County, Delaware

- In-State, In-Market Broadcast Stations Received Over the Air
 - Sussex County receives one in-state full-power station, WDPB (PBS), Seaford, Delaware, one in-state, in-market low-power station, WRDE-LD (NBC/Coz); Rehoboth Beach, Delaware, assigned to the Salisbury DMA.
- DBS Carriage of In State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Salisbury DMA.
 - Both providers offer WDPB (PBS) of Seaford, DE and WRDE (NBC/Coz) of Rehoboth Beach, DE, assigned to the Salisbury, MD DMA.

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Sussex County, DE?	Network Affiliation	DIRECTV Carriage?	DISH Carriage?
WDPB	DT	Salisbury, MD	Seaford, DE	Yes	PBS	Yes	Yes
WRDE	LD	Salisbury, MD	Rehoboth Beach, DE	Yes	NBC, Cozi TV	Yes	Yes

- Cable Carriage of In State, In-Market Broadcast Stations
 - Mediacom is the Cable MVPD in Sussex County and serves the following communities: Bayard, Bethany Beach, Clarksville, Dagsboro, Frankford, Lewes, Middlesex Beach, Millsboro, Millville, Ocean View, Roxana, Shelbyville, and South Bethany, Delaware; Bishopville, Ocean Pines, Pittsville, Whaleysville, Wicomico County, Willards, and Worcester County, Maryland.
 - Comcast also a cable MVPD in Sussex County and serves the following communities: Bethel, Blades, Bridgeville, Broadkill Beach, Dewey Beach, Ellendale, Georgetown, Greenwood, Henlopen Acres, Kent County, Laurel, Lewes, Lincoln, Milford, Milton, Rehoboth Beach, Seaford, and Slaughter Beach, Delaware.
 - Both cable providers offer the following in-state, in-market broadcast stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Sussex County, DE?	Network Affiliation	Significantly Viewed?	Mediacom Carriage?	Comcast Carriage?
WDPB	DT	Salisbury, MD	Seaford, DE	Yes	PBS	No	Yes	Yes
WRDE-LD	LD	Salisbury, MD	Rehoboth Beach, DE	Yes	NBC, Cozi TV	No	Yes	Yes
WEWE-LP	LD	Salisbury, MD	Sussex County, DE	Yes	IND	No	Yes	Yes

3. In-State Local Programming in Sussex County, Delaware

- Local News Programming Received Over the Air
 - The following in-state stations provide relevant local news and information to Sussex County and the state of Delaware:
 - WRDE-LD (NBC), located in Rehoboth Beach, airs over three hours of local daily news.
 - WDPB (PBS), located in Seaford, airs ten hours of educational programming and also airs, *First*, a weekly news magazine focused on the state of Delaware and *Articulate*, a weekly local arts and culture magazine show.

IX. Salt Lake City, UT DMA: Elko County, Nevada is assigned to the Salt Lake City DMA, ranked 34th, is based in the state of Utah. The Salt Lake City DMA is also comprised of two additional Nevada counties three Idaho counties, and 29 Utah counties. This case study considers Elko County.²²

A. Elko County, Nevada

1. Out-of-Market Broadcast Stations Received in Elko County, Nevada

- Out-of-Market Broadcast Stations Received Over the Air:
 - The total population in Elko County, Nevada is 48,818.
 - Elko County does not receive out-of-market broadcast stations over the air.
- Out-of-Market Stations on the Significantly Viewed Stations List for Elko County, Nevada

Station	Type of Service	City, State of License	Network Affiliation	Station's Assigned DMA
KBCI-TV	DT	Boise, ID	PBS	Spokane, WA
KTVB	DT	Boise, ID	NBC, News, Justice TV	Boise, ID
KOLO-TV	DT	Reno, NV	ABC, Movies TV	Reno, NV

- Out-of-Market Stations Carried By DBS
 - Both DISH and DIRECTV offer local-into-local service in the Salt Lake City DMA. Neither provider offers out-of-market broadcast stations in this market.

²² In the last report, Commenters stated that Salt Lake City is in the Mountain Time Zone, while Elko is in the Pacific Time Zone, resulting in news and weather reports being an hour behind. *See* Darlene Elvin Comments (Mar. 21, 2011).

- Out-of-Market Stations Carried By Cable

- Satview²³ is the cable MVPD in Elko, Nevada, and offers three out-of-market broadcast stations:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-State as to Elko County, NV?	Network Affiliation	Significantly Viewed?	Satview Carriage?
KOLO-TV	DT	Reno, NV	Reno, NV	Yes	ABC, Movies TV	Yes	Yes
KTVN	DT	Reno, NV	Reno, NV	Yes	CBS, Antenna TV	No	Yes
KNPB	DT	Reno, NV	Reno, NV	Yes	PBS	No	Yes

2. In-State, In-Market Broadcast Stations in Elko County, Nevada

- In-State, In-Market Broadcast Stations Received Over the Air

- The total population in Elko County, Nevada is 48,818.

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Elko County, NV?	Network Affiliation	Significantly Viewed?	Population Served by Station in County	% of County served by this station
KENV-TV	DT	Salt Lake City, UT	Elko, NV	Yes	NBC	No	38,812	82%
K06MK	LD	Salt Lake City, UT	Elko, NV	Yes	CBS	No	28,643	59%
K15EE	LD	Salt Lake City, UT	Elko, NV	Yes	PBS	No	35,692	73%
K26JB	LD	Salt Lake City, UT	Wells, NV	Yes	CW	No	1,779	4%
K12PT	LD	Salt Lake City, UT	Ryndon, NV	Yes	NBC	No	787	2%
K47HP	LD	Salt Lake City, UT	Elko, NV	Yes	MNT	No	35,601	73%
K34HE	LD	Salt Lake City, UT	Elko, NV	Yes	CW	No	35,639	73%
K17DT	LD	Salt Lake City, UT	Elko, NV	Yes	MNT	No	35,684	73%
K06NY	LD	Salt Lake City, UT	Ryndon, NV	Yes	CBS	No	697	1%
Station	Type of	Station's Assigned	City, State of License	In-state as to	Network Affiliation	Significantly Viewed?	Population Served by	% of County

²³ Satview Broadband Ltd., <http://www.satview.net/lineup.html> (last visited June 1, 2016).

	Service	DMA		Elko County, NV?			Station in County	served by this station
K50CA	TX	Salt Lake City, UT	Elko, NV	Yes	ABC	No	601	1%
K19FZ	LD	Salt Lake City, UT	Elko, NV	Yes	IND	No	34,637	71%
K31LB	TX	Salt Lake City, UT	Elko, NV	Yes	IND	No	2,145	4%
K12MS	LD	Salt Lake City, UT	Elko, NV	Yes	NBC	No	3,977	8%
K08LS	LD	Salt Lake City, UT	Elko, NV	Yes	ABC	No	24,944	51%
K36HA	LD	Salt Lake City, UT	Elko, NV	Yes	CBS	No	35,627	73%
K27DY	TX	Salt Lake City, UT	Carlin, NV	Yes	MNT	No	1,115	2%
K29IM	TX	Salt Lake City, UT	Elko, NV	Yes	FOX	No	19,206	39%
K22GW	LD	Salt Lake City, UT	Wells, NV	Yes	IND	No	1,779	4%
K08NQ	LD	Salt Lake City, UT	Ryndon, NV	Yes	ABC	No	755	2%
K33DP	TX	Salt Lake City, UT	Carlin, NV	Yes	PBS	No	2,001	4%
K05JU	LD	Salt Lake City, UT	Elko, NV	Yes	IND	No	28,713	59%
K32GK	LD	Salt Lake City, UT	Elko, NV	Yes	CBS	No	35,661	73%
K23FC	LD	Salt Lake City, UT	Elko, NV	Yes	PBS	No	35,035	72%
K38IF	LD	Salt Lake City, UT	Elko, NV	Yes	CW	No	35,002	72%
K20IQ	LD	Salt Lake City, UT	Wells, NV	Yes	PBS	No	1,789	4%
K24GE	LD	Salt Lake City, UT	Wells, NV	Yes	NBC	No	1,778	4%
K08IO	LD	Salt Lake City, UT	Wells, NV	Yes	ABC	No	1,621	3%
K16FV	LD	Salt Lake City, UT	Ryndon, NV	Yes	FOX	No	863	2%
K25FR	LD	Salt Lake City, UT	Elko, NV	Yes	CBS	No	35,007	72%

- DBS Carriage of In-State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Salisbury DMA. Neither provider offers Nevada broadcast stations as part of their service.
- Cable Carriage of In-State, In-Market Broadcast Stations
 - Satview is the cable MVPD in Elko County and serves two communities Elko County and Spring Creek, Nevada.
 - This cable provider does not offer in-state, in-market broadcast stations.
- 3. In-State Local Programming in Elko County, Nevada**
- Local News Programming Received Over the Air
 - One in-state station provides relevant local news and information for Elko County and in the state of Nevada.
 - KENV-TV (NBC), located in Elko, airs over three hours of daily news. This station also airs, *Nevada Business Chronicles*, a weekly program highlighting innovative Nevada businesses and *Nevada Newsmakers*, a weekly Nevada political show.

X. Washington, DC-Hagerstown, MD DMA: Fulton County, Pennsylvania and Grant County West Virginia, are both assigned to the Washington, DC-Hagerstown DMA, ranked 8th, based in the District of Columbia. The Washington, DC-Hagerstown DMA is comprised of 23 Virginia counties, eight Maryland counties, seven West Virginia counties, one Pennsylvania County, and the District of Columbia. This case study considers Fulton County, Pennsylvania and Grant County, West Virginia.

A. Fulton County, Pennsylvania

1. Out-of-Market Broadcast Stations Received in Fulton County, PA

- Out-of-Market Broadcast Stations Received Over the Air (OTA)
 - Fulton County has a total population of 14,845.

Station	Type of Service	Assigned DMA	City, State of License	In-state as to Fulton County, PA?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WHTM-TV	DT	Harrisburg, PA	Harrisburg, PA	Yes	ABC, ION, Get TV	No	535	4%
WTAJ-TV	DT	Johnstown, PA	Altoona, PA	Yes	CBS	Yes	8266	56%
WATM-TV	DT	Johnstown, PA	Altoona, PA	Yes	ABC, FOX, Antenna TV, This TV	No	7131	48%
WPSU-TV	DT	Johnstown, PA	Clearfield, PA	Yes	PBS	No	209	1%
WKBS-TV	DT	Johnstown, PA	Altoona, PA	Yes	IND	No	3516	24%
Station	Type of	Assigned	City, State of	In-state as to	Network	Significantly	Population Served by	% of county

	Service	DMA	License	Fulton County, PA?	Affiliation	Viewed?	station in the County	served by this station
WJAC-TV	DT	Johnstown, PA	Johnstown, PA	Yes	NBC, MeTV	Yes	4369	29%
WTOO-CD	DC	Johnstown, PA	Bolivar, PA	Yes	Shopping Networks	No	1480	10%
W33CR	LD	Harrisburg	Chambersburg, PA	Yes	PBS	No	6384	43%

- Out-of-Market Stations Carried By DBS
 - Both DISH and DIRECTV offer local-into-local service in the Washington DMA. Neither providers offer out-of-market broadcast stations as part of their service.
- Out-of-Market Stations Carried By Cable
 - Comcast is a cable MVPD in Fulton County. This cable provider does not offer out-of-market broadcast stations in this market.
- Out-of-Market Stations on the Significantly Viewed Stations List for Fulton County, Pennsylvania

Station	City, State	Type of Service	Affiliation	DMA this Station is Assigned to
WJAC-TV	Johnstown, PA	DT	NBC	Johnstown
WTAJ-TV	Johnstown, PA	DT	CBS	Johnstown

2. In-State, In-Market Broadcast Stations Received in Fulton County, Pennsylvania

- In-State, In-Market Broadcast Stations Received Over the Air
 - Fulton County does not receive in-state, in-market broadcast stations over the air.
- DBS Carriage of In-State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Washington, DC DMA. Neither provider offers Pennsylvania stations as part of their service.
- Cable Carriage of In-State, In-Market Broadcast Stations
 - Comcast is a cable MVPD in Fulton County serving 20 communities: Washington, and Hancock, Maryland; Berkeley, Jefferson, Morgan, Bath (town), Berkeley Springs, Bolivar, Charles Town, Great Cacapon, Harpers Ferry, Hedgesville, Inwood, Kearneysville, Martinsburg, Morgan County, and Ranson, West Virginia.

- Comcast does not offer in-state, in-market broadcast stations as part of its service:

3. In-State Local Programming in Fulton, County, Pennsylvania

- Local News Programming Received Over the Air
 - The following in-state stations provide relevant local news and information to Fulton County and in the state of Pennsylvania.
 - WHTM-TV (ABC/ION), located in Harrisburg, airs five hours of daily local news coverage, and also airs, *Good Day PA*, a daily program featuring local business offering information about local nonprofit groups.
 - WTAJ-TV (CBS), located in Altoona, airs five hours of local daily news coverage and also airs, *Central PA-Live*, a weekly local program featuring upcoming events from around the region.
 - WJAC-TV (NBC), located in Johnstown, airs over 8 hours of local daily news.

B. Grant County, West Virginia

1. Out-of-Market Broadcast Stations Received in Grant County, West Virginia

- Out-of-Market Broadcast Stations Received Over the Air (OTA)
 - Grant County has a total population of 11,937.

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Grant County, WV?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WHSV-TV	DT	Harrisonburg, VA	Harrisonburg, VA	No	ABC	Yes	3,541	30%
WBOY-TV	DT	Clarksburg, WV	Clarksburg, WV	Yes	NBC	No	319	3%
WDTV	DT	Clarksburg, WV	Weston, WV	Yes	CBS	No	1,317	11%
WNPB-TV	DT	Pittsburgh, PA	Morgantown, WV	Yes	PBS	No	2,514	21%
WGPT	DT	Pittsburgh, PA	Oakland, MD	No	PBS	No	2,955	25%
W30CT	LD	Harrisonburg, Virginia	Harrisonburg, VA	No	NBC	No	216	2%
WSVF-CD	LD	Harrisonburg, VA	Harrisonburg, VA	No	CBS/FOX	No	91	1%

- Out-of-Market Stations Carried By DBS
 - Both DISH and DIRECTV offer local-into-local service in the Washington DMA. Neither provider offers out-of-market broadcast stations as part of their service in this county.

- Out-of-Market Stations Carried By Cable

- Shentel Communications serves as the cable MVPD in Grant County.

Station	Type of Service	Assigned DMA	City, State	In-state as to Grant County	Affiliation	Significantly Viewed?	Shentel Carriage?
WDTV	DT	Clarksburg, WV	Weston, WV	Yes	CBS, Weather	No	Yes
WNPB	DT	Pittsburgh, PA	Morgantown, WV	Yes	PBS	No	Yes
WHSV-TV	DT	Harrisonburg, VA	Harrisonburg, VA	No	ABC	Yes	Yes

- Out-of-Market Stations on the Significantly Viewed Stations List for Grant, County, Pennsylvania

Station	City, State	Type of Service	Affiliation	DMA this Station is Assigned to
WJAC-TV	Johnstown, PA	DT	NBC, MeTV	Johnstown, PA
WHSV-TV	Harrisonburg, VA	DT	ABC, CBS, MNT, MeTV	Harrisonburg, VA

2. In-State, In-Market Broadcast Stations Received in Grant County, West Virginia

- In-State, In-Market Broadcast Stations Received Over the Air

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Grant County, WV?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
WWPX-TV	DT	Washington, DC	Martinsburg, WV	Yes	ION, ION Life, HSN, QVC, qubo	No	660	6%
W09CT	LD	Washington, DC	Mathias, WV	Yes	PBS	No	2,012	17%
W41DK	LD	Washington, DC	Keyser, WV	Yes	PBS	No	4,688	39%
W29DH	LD	Washington, DC	Moorefield, WV	Yes	NBC	No	1,141	10%
W07DN	LD	Washington, DC	Wardensville, WV	Yes	PBS	No	62	1%
W46BR	LD	Washington, DC	Moorefield, WV	Yes	FOX	No	1,041	9%
W23DR	LD	Washington, DC	Romney, WV	Yes	PBS	No	4,251	36%
W22CV	LD	Washington, DC	Moorefield, WV	Yes	PBS	No	12,339	11%

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Grant County, WV?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
W40AS	LD	Washington, DC	Moorefield, WV	Yes	ABC	No	974	8%
W50BD	LD	Washington, DC	Moorefield, WV	Yes	CBS	No	992	8%

- DBS Carriage of In-State, In-Market Broadcast Stations

- Both DISH and DIRECTV offer local-into-local service in the Washington DMA. Neither provider offers Pennsylvania broadcast stations as part of their service.

- Cable Carriage of In-State, In-Market Broadcast Stations

- Shentel is a cable MVPD in Grant County, serving four communities: Franklin, Grant, Pendleton, and Petersburg, West Virginia.
 - Shentel does not offer West Virginia, broadcast stations as part of their service in this county.

3. In-State Local Programming in Grant County, West Virginia

- Local News Programming Received Over the Air

- The following in-state stations provide relevant local news and information to Grant County and in the state of West Virginia:
 - WDTV (CBS/Wx), located in Weston, airs over twelve hours of daily local news and its multicast station airs 24 hours of local weather.
 - WBOY-TV (NBC/ABC), located in Clarksburg, airs six hours of local news coverage daily on the NBC station and six hours of local news daily on the ABC multicast station.
 - WNPB-TV (PBS/CRT), located in Morgantown, airs three hours of local news daily, Monday through Friday on both stations. This station also airs, *Legislature Today*, a daily locally focused program featuring legislative news and information for West Virginia.

XI. Yakima-Pasco-Richland-Kennewick, WA DMA: Umatilla County, is the only Oregon County, assigned to the Yakima-Pasco-Richland-Kennewick, WA DMA. This DMA is ranked 123rd and is based in the state of Washington. The Yakima-Pasco, WA DMA is comprised of this one Oregon County and five Washington Counties. The total county population in Umatilla County, Oregon, is 75,889. This case study considers Umatilla County.

A. Umatilla County, Oregon**1. Out-of-Market Broadcast Stations Received in Umatilla County, Oregon**

- Out-of-Market Broadcast Stations Received Over the Air:

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Umatilla County, OR?	Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
KTVR	DT	Portland, OR	La Grande, OR	Yes	PBS	No	11,021	15%
KUNP	DT	Portland, OR	La Grande, OR	Yes	Univision, Mundomax	No	3,497	5%

- Out-of-Market Stations on the Significantly Viewed Stations List for Umatilla County, Oregon

- Umatilla County does not receive out-of-market significantly viewed broadcast stations.

- Out-of-Market Stations Carried By DBS

- Both DISH and DIRECTV offer local-into-local service in the Yakima DMA. Neither provider offers Oregon stations as part of their service.

- Out-of-Market, In-State Stations Offered By Cable

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Umatilla County, OR?	Network Affiliation	Significantly Viewed?	Charter Carriage?
KATU	DT	Portland, OR	Portland, OR	Yes	ABC, MeTV, Get TV	No	Yes
KGW	DT	Portland, OR	Portland, OR	Yes	NBC, Justice TV, Estrella TV	No	Yes
KTVR	DT	Portland, OR	La Grande, OR	Yes	PBS	No	Yes

2. In-State, In-Market Broadcast Stations Received in Umatilla County, Oregon

- In-State, In-Market Broadcast Stations Received Over the Air

Station	Type of Service	Station's Assigned DMA	City, State of License	In-state as to Umatilla County, OR?	Network Affiliation	Significantly Viewed?	Population Served by station in the County	% of county served by this station
KFFX-TV	DT	Yakima, WA	Pendleton, OR	Yes	FOX, This TV	No	11,021	15%
K32DE	LD	Yakima, WA	Pendleton, OR	Yes	CBS	No	643	1%
Station	Type of	Station's Assigned	City, State	In-state as to	Network	Significantly	Population Served by	% of county

	Service	DMA	of License	Umatilla County, OR?	Affiliation	Viewed?	station in the County	served by this station
K34DI	LD	Yakima, WA	Pendleton, OR	Yes	ABC	No	615	1%
K36DP	LD	Yakima, WA	Pendleton, OR	Yes	NBC	No	582	1%
K42IT	LD	Yakima, WA	Pendleton, OR	Yes	PBS	No	28,193	37%
K51DF	LD	Yakima, WA	Milton- Freewater, OR	Yes	CBS	No	13,869	18%
K28FT	LD	Yakima, WA	Milton- Freewater, OR	Yes	ABC	No	13,654	18%
K35FO	LD	Yakima, WA	Milton- Freewater, OR	Yes	FOX	No	13,832	18%
K23FH	LD	Yakima, WA	Milton- Freewater, OR	Yes	FOX	No	13,909	18%
K40FM	LD	Yakima, WA	Milton- Freewater, OR	Yes	NBC	No	13,931	18%
K22JJ	LD	Yakima, WA	Milton- Freewater, OR	Yes	CBS	No	14,075	19%
K50FX	LD	Yakima, WA	Milton- Freewater, OR	Yes	PBS	No	14,211	19%
K29EG	LD	Yakima, WA	Milton- Freewater, OR	Yes	PBS	No	14,103	19%
K48DZ	LD	Yakima, WA	Hermiston, OR	Yes	Three Angels Network	No	36,774	48%
K24JI	LD	Yakima, WA	Hermiston, OR	Yes	IND	No	24,811	33%
K28GD	LD	Yakima, WA	Hepner, OR	Yes	PBS	No	658	1%

- DBS Carriage of In-State, In-Market Broadcast Stations
 - Both DISH and DIRECTV offer local-into-local service in the Yakima DMA.
 - DIRECTV offers one in-state station, KFFX-TV (FOX/Ths), Pendleton, Oregon, as part of its service. This station, however, is a satellite of station, KCYU-LD (FOX), Yakima, Washington, assigned to the Yakima-Pasco, WA DMA.
 - Cable Carriage of In-State, In-Market Broadcast Stations
 - Charter Communications is the cable MVPD in Umatilla County, serving 16 communities: Benton, Echo, Franklin, Hermiston, Milton-Freewater, Pendleton, Stanfield, Oregon; Benton County. College Place, Dixie, Franklin County, Kennewick, Pasco, Richland, Waitsburg, and Walla Walla, Washington.
 - Charter offers one in-market, in-state station, KFFX-TV (FOX/Ths), Pendleton, Oregon, assigned to the Yakima DMA. This station, however, is a satellite of station, KCYU-LD (FOX), Yakima, Washington, assigned to the Yakima-Pasco, WA DMA.
- 3. In-State Local Programming in Umatilla County, Oregon**
- Local News Programming Received Over the Air
 - One station, KTVR (PBS), located in La Grande, airs four hours of daily local news and also airs, *Oregon Revealed*, a weekly program featuring art and culture in the state.

Statement of Jerald N. Fritz

CTV 2004-2005 Direct Case

**Before the
COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of

**Distribution of the
2004 and 2005
Cable Royalty Funds**

Docket No. 2007-3 CRB CD 2004-2005

**Testimony of
Jerald N. Fritz**

June 1, 2009

Corrected October 1, 2009

STATEMENT OF JERALD N. FRITZ

I. Background

My name is Jerald N. Fritz, and I am appearing on behalf of the Commercial Television Claimants. I am a Senior Vice President for Legal and Strategic Affairs for Allbritton Communications Company, which is based in Arlington, Virginia. I serve as general counsel for Allbritton's eight ABC-affiliated television stations, four newspapers, cable news channel, and websites and Internet ventures, and I also oversee government relations and long-term strategic planning for the group. My resume is attached as Appendix 1.

I have worked 41 years in and around the broadcasting business. Besides my legal work, I have had direct experience in many television station jobs, including news reporting, advertising sales and purchasing, station operations, writing, programming, and community relations. I have also worked in industry-wide organizations and on broadcast business and policy issues both in government and in private industry, including service as Chief of Staff of the Federal Communications Commission. I have been a Director on the NAB TV Board, and have served on the NAB's Digital Television Task Force as well as its EEO, Web Streaming and Copyright Committees. I serve on the faculty of the National Association of Broadcasters Educational Foundation's Broadcast Leadership Training Center as well as the Media Sales Institute. My public policy and strategic planning work have provided me a broad familiarity with developments in the television industry over the past several decades. I have written and spoken before Congress and elsewhere on issues such as program ownership rights, distribution platforms and copyright relationships.

II. The News and Other Programming Produced by Television Stations in 2004 and 2005 Had a Value That Extended Beyond the Stations' Local Markets

A wide variety of programming is included within the "Commercial Television" category, which I understand is defined for these proceedings as programs produced by or for a U.S. commercial television station and broadcast only by that station during the year. The majority of the programming in this category are newscasts produced by stations, often including morning, daytime, and evening newscasts and alerts throughout the day. But the category also includes sports-related programming, such as pre- and post-game shows, special coverage of local teams, and various coaches' shows. It includes a range of specials, highlighting news and special events of local and regional significance. Commercial television stations also produce public affairs and "magazine" shows, human interest specials, local religious services, do-it-yourself shows, special coverage of severe weather, and a variety of other programs. I understand that another Commercial Television witness, Dr. Richard Ducey, has presented examples illustrating the wide range of station-produced programs in prior proceedings. Based on my knowledge of the industry, the same sort of variety of programs was being produced by television stations in 2004-2005.

In the increasingly competitive, multi-platform program distribution industry, maintaining unique, valued programming is a primary, critical, strategic goal. Local television stations are in an unmatched position to capitalize on that need by delivering local programming unavailable from other sources. That programming is targeted to meet the informational needs of local and regional viewers and is not duplicated by other video programming providers. The availability of a deeper advertising base in larger television markets generally permits stations in those markets to support the resources needed to produce higher quality, more frequent and

broader-appeal programming, but even stations in the smallest markets provide news and informational programming available from no other provider.

III. Allbritton Stations' Programming Has Significant Regional Appeal

For illustrative purposes, I describe the circumstances of six Allbritton stations that were carried as distant signals in 2005, including the locations in which they were carried and the regional appeal of the programming they produced.

In 2005, the Allbritton station carried most widely as a distant signal was KATV, in Little Rock, Arkansas. Based on data from Cable Data Corporation, thirteen "Form 3" systems carried KATV as a distant or partially distant signal in the second half of 2005. Exhibit 15 is a map showing the locations of the systems that reported carrying KATV, identified just as a dot showing the first city listed by the cable system in its Statement of Account. The systems themselves, of course, cover broader geographic areas. In addition, the map shows the television markets, defined by The Nielsen Company as Designated Market Areas or "DMAs," in which those cable communities are located, along with the DMAs' ranks, which show the relative size of the television market, with smaller numbers indicating larger markets.

As you can see from the map, the systems that carried KATV serve relatively nearby cable communities, all but the Blytheville, Arkansas, system within 150 miles of Little Rock (indicated by the dashed-line circle). Little Rock is the largest city in the state and the state's capital, and eight of the thirteen cable systems are in Arkansas.¹ Six of those eight are in DMAs that are assigned to different states, so their primary local signals would be from Missouri, Tennessee, Mississippi, or Louisiana, even though their subscribers reside in Arkansas. And

¹ Two more, the systems in Memphis, Tennessee, and Texarkana, Texas, also serve communities in Arkansas.

most of the systems carrying KATV as a distant signal were in smaller television markets than Little Rock.

Against this backdrop, Exhibit 16 lists programs KATV produced in 2005 that fall within the Commercial Television program category. KATV produced some five hours of daily newscasts and news programs, which covered breaking news stories as well as state capitol news, state-wide weather, state-wide and regional sports, and state-wide human interest stories. KATV's news has for many years been ranked as the top rated newscast in all day-parts in the entire State of Arkansas by Nielsen, and is the recipient of numerous news awards, including Emmys for Best Newscasts and Edward R. Murrow awards for news coverage and investigative reporting. KATV was also the exclusive licensee of the University of Arkansas football and basketball programming. Under its arrangement with the University, KATV had the television rights to all non-network games, and also produced pre/post game analysis programming, weekly coaches' shows and season preview/wrap-up shows. Similarly, KATV's unique and extensive video archives are unmatched in the nation, serving as a resource for national and local stories unavailable anywhere else. For example, local and national stories about former President Clinton that relied on footage from his early political years as Arkansas Attorney General and Governor were unique to KATV. These programs would be of interest in the cable communities where KATV was carried as a distant signal.

As a state with no professional team in any major sport, University of Arkansas games and sports-related programs have an interest almost unmatched in the country. Arkansas state residents who reside in out-of-state DMAs are frequently rabid University of Arkansas Razorback fans and have intense interest in viewing any programming about the teams. The station's sports director was the "Voice of the Razorbacks," and KATV's newscasts were seen

by viewers throughout the state as having unparalleled access to the University's sports teams. Besides shows featuring coaches and teams from the University of Arkansas, the station produced a show featuring the University of Central Arkansas football coach, and a special about a Little Rock native who rose to prominence as the undisputed world middleweight boxing champion.

The station's weather alerts and special weather programming are also seen as preeminent throughout the state. KATV's Doppler weather technology permits it to provide customized forecasts and storm tracking of critical importance to residents of central Arkansas, including those in adjacent DMAs. This service is especially crucial since the markets in the state are at the confluence of "Tornado Alley" and the "Gulf Hurricane Track," making them susceptible to dangerous weather during a majority of the year.

The other five Allbritton stations carried as distant signals in 2005 showed similar patterns of carriage by relatively nearby cable systems in adjacent DMAs, including a number of instances of "partially distant" carriage where the cable system's subscribers were partially within and partially outside the station's home DMA. These instances of distant carriage are listed in Exhibit 17. The Allbritton stations similarly produced extensive programming of interest to these nearby regions. Exhibit 18 lists station-produced programs that were broadcast on these stations in 2005.

IV. Cable Market Circumstances May Vary, But Station-Produced Programming on the Distant Stations They Choose To Carry Adds Value.

I understand that other witnesses appearing on behalf of the Commercial Television Claimants will present evidence about the relative value cable operators attribute to Commercial

Television programming in the distant signal market as a whole, and that a survey of cable operators in 2004-2005 showed that cable operators attributed about 16 percent of the value of distant signal programming to the stations' own programs. I also understand that a comprehensive analysis of cable carriage data shows that more than 90 percent of all carriage of distant signals other than superstations occurred within 150 miles of the home city of the distant signal in 2004-2005. My experience of the industry as a whole, as well as the specific circumstances of the Allbritton stations that were carried as distant signals in 2005, are entirely consistent with that other evidence. As evidence of the importance of Little Rock programming to those residents in adjacent DMAs, Congressman Mike Ross has recently proposed legislation that would facilitate the importation of that programming to all 22 counties in Arkansas that are part of other DMAs notwithstanding the exclusive nature of any privately negotiated programming arrangements. Congressman Ross's bill would permit carriage of all programming from the Little Rock stations on cable systems and on direct-to-home satellites for residents in the in-state but out-of-market counties. Congressman Ross has specifically cited constituent demands and the need to have emergency weather bulletins from Little Rock stations throughout the state.

While every cable community has its own set of circumstances that may affect the relative value of distant signal programs, and some may differ from the KATV example, it is my opinion that the overall value of station produced programs to distant cable operators who choose to carry them is at least the 16 percent reported in the cable operator survey.

Before the
COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

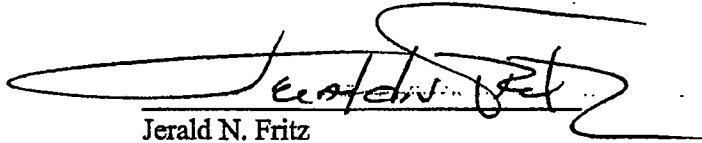
In the Matter of

Distribution of the
2004 and 2005
Cable Royalty Funds

Docket No. 2007-3 CRB CD 2004-2005

DECLARATION

I, Jerald N. Fritz, declare under penalty of perjury that the Testimony of Jerald N. Fritz presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct to the best of my knowledge, information and belief.



Jerald N. Fritz

Dated: May 28, 2009

Before the
COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In the Matter of)
)
)

Distribution of the)
2004 and 2005)
Cable Royalty Funds)
_____)

Docket No. 2007-3 CRB CD 2004-2005

DECLARATION

I, Jerald N. Fritz, declare under penalty of perjury that the Statement of Jerald N. Fritz presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding, as corrected October 1, 2009, is true and correct.


Jerald N. Fritz

Dated: 9-29-09

APPENDIX 1

Testimony of Jerald N. Fritz

Resume

Jerald N. Fritz
Senior Vice President, Legal and Strategic Affairs
and General Counsel
Allbritton Communications Company
Arlington, VA

Jerald Fritz is Senior Vice President for Legal and Strategic Affairs for Arlington, VA-based Allbritton Communications Company. In addition to his duties as general counsel for Allbritton's eight ABC-affiliated television stations, four newspapers, cable news channel, multiple websites and Internet ventures, Mr. Fritz also oversees government relations and long term strategic planning for the group.

Mr. Fritz joined Allbritton in 1987 after serving as Chief of Staff to FCC Chairman Mark Fowler and as a primary architect of deregulatory efforts in the broadcasting and telecommunications industries. Prior to joining the Chairman's staff, he practiced communications law and taught on the adjunct faculty at George Mason University Law School. Mr. Fritz is a '73 Northwestern University graduate with a degree in Radio, Television and Film and a '76 graduate of the Notre Dame Law School where he was the Executive Editor of the *Journal of Legislation*.

Mr. Fritz has worked most station jobs, including news reporting, selling and buying advertising time, control room and studio operations, promo writing, programming, and community relations. He is the author of the *Broadcast Station Legal Audit*, an operational compliance compendium, and has lectured extensively and testified before Congress on communications law and policy and the future of the telecommunications industry, including program ownership rights, distribution platforms and copyright relationships. Mr. Fritz has helped to craft major telecommunications legislation as well as FCC regulations involving media ownership, content regulation and competitive carriers. He also has been intimately involved in the expansion of traditional lines of business for broadcasters, including 24-hour local cable news, web-casting and niche publications.

Mr. Fritz served as a Director on the NAB TV Board where he chaired the NAB-X.com Task Force for a virtual trade show and served on the NAB's Digital Television Task Force as well as its EEO, Web Streaming and Copyright Committees. A former American Bar Association Communications Law Forum Governing Committee member, Mr. Fritz is a past Forum Division Chair and is also a member of the Federal Communications Bar Association, having chaired its Continuing Education Committee. Mr. Fritz is a past co-chair of the Media Law Resource Center's Pre-Publication Review Committee and serves on the faculty of the National Association of Broadcaster's Educational Foundation's Broadcast Leadership Training Center as well as the Media Sales Institute. He currently sits on the advisory committee to the Council for Court Excellence in Washington, DC.

Jerald N. Fritz

Publications

- The Fairness Doctrine: Abolishing the Illusion of Fairness, *Notre Dame Journal of Legislation*, Volume 2, 1975, pp 48-57
- Hidden-Cameras – Protocol for Use, *Communications Lawyer*, Forum on Communications Law American Bar Association Volume 16, Number 4, Winter 1999, pp. 22-23
- Promo Tips, *Communications Lawyer*, Forum on Communications Law American Bar Association Volume 19, Number 3, Fall 2001, p. 21
- Prepublication / Prebroadcast Checklist, Media Law Resource Center, 2005
- Checklist On Identifying/Interviewing Children As Perpetrators, Victims And/Or Witnesses, Media Law Resource Center, February, 2006
- “Sting” Stories – Investigative Reporting, Media Law Resource Center, 2008

Testimony

- *Future of Telecommunications*, National Association of Governors, Chicago, IL, September 7, 1983
- *Political Advertising*, U.S. House of Representatives, Telecommunications Subcommittee, June 13, 1991
- *Exemptions to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies – News Monitoring and “Fair Use,”* The Copyright Office, May 9, 2003
- *Retransmission Consent*, U.S. House of Representatives, Commerce Committee, March 30, 2006

Speeches

- *Broadcast Deregulation*, Colorado Assn. Broadcasters, Denver, CO, January 21, 1982
- *Re-pricing Telecom Services*, Telestrategies Conference, Washington, DC. February 28, 1984
- *Telecom Regulation*, Federal Bar Assn., Washington, DC, June 8, 1984
- *Bell Breakup*, Teleprocessing Symposium, San Francisco, CA, January 13, 1986
- *U.S. Broadcast Deregulation*, Federation of Australian Commercial Television Stations, Adelaide, Australia, November 28, 1986
- *Synergies of Cross-Platform Media Ownership*, International Radio and Television Society, New York, NY, February 6, 1992
- *Telecom Privatization*, Russian Consortium, Washington, DC, March 9, 1998
- *Internet “Teletstreaming” of Broadcast Content*, American Women in Radio and Television, Washington, DC, May 6, 1999
- *Business of Broadcasting*, American Bar Assn. Communications Forum, Boca Raton, February 13, 1999
- *Broadcast Advertising*, American Bar Assn. Communications Forum, Las Vegas, NV, April 18, 1999
- *Newsroom Legal Issues*, Radio & Television News Directors Assn., Las Vegas, NV, April 8, 2002
- *Future of Video Distribution*, American Enterprise Institute, Washington, DC, June 13, 2002
- *Impact of Cable, DBS & Personal Video Recorder Competition*, Bear Sterns Television Industry Summit, Washington, DC November 26, 2002
- *Retransmission Consent - Cable/Broadcast Relationships*, U.S. House of Representatives Staff Briefing, April 12, 2007
- *On-Line Reporting*, Radio Television News Directors Association, Las Vegas Nevada, April 15, 2008

- *The FCC's "Public Interest" Standard*, American Bar Association Communications Forum, Las Vegas, Nevada, April 13, 2008
- *Non-Traditional Revenues*, National Association of Broadcasters Futures Summit, Monterey, California, March 23, 2009
- *The Fairness Doctrine*, Judicial Watch Seminar, The National Press Club, May 14, 2009

Television Interviews

- *Television Station Ownership – Future of Broadcasting*, "The Communicators," C-SPAN, May, 18, 2008

Lectures

- *Changing Face of Communications Industry Competition*, Annenberg School, Northwestern University, Washington, DC May 5, 1994
- *Telecom Regulation*, UCLA Law School, Los Angeles, CA, February 1, 1992
- *Broadcast Regulation*, Boston University Law School, Boston, MA, November 8, 1993
- *Digital Television Implementation*, Northwestern University, Evanston IL, May 7, 1998
- *Syndication/Network Affiliate Programming*, Notre Dame Law School, South Bend, IN, November 1, 2002
- *Broadcast Indecency Standards*, Progress in Freedom Foundation Congressional Seminar, April 5, 2005
- *Broadcast Sales – Antitrust Pitfalls*, Media Sales Institute – Howard University, June 7, 2005
- *Prepublication/Prebroadcast Review*, Media Law Resource Center Annual Meeting, Arlington, Virginia, September 28, 2006
- *In-House Counsel Practice – New Media*, University of Virginia Law School, Charlottesville, Virginia, November 30, 2006
- *Broadcast Station Operations*, National Association of Broadcasters Education Foundation, Broadcast Leadership Training Program Faculty, 2000-present

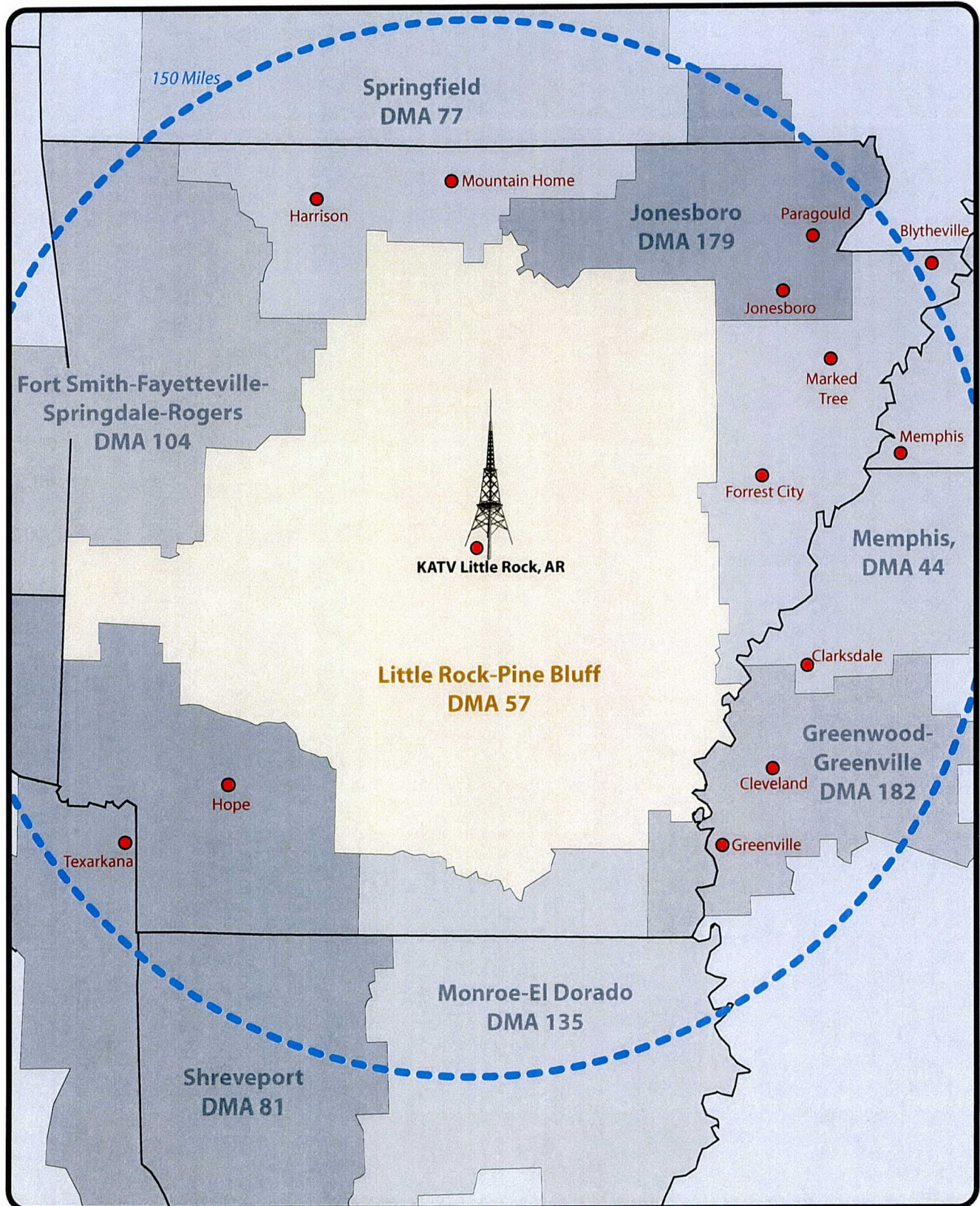
Expert Testimony

- *Jurgenson v. WUSA-TV - Gannett*, Collective Bargaining Agreement Arbitration, 1992 (Post-termination talent contract restrictions)
- *EchoStar Satellite Corporation v. TZ Azteca S.A. de C.V.*, No. 02-Civ-4890 (AKH)(Southern District of New York), March 2003 (Broadcast and Satellite industry structure and relationship)
- *Deseret Management Corporation v. United States*, No. 06-86 (U.S. Court of Federal Claims), June 2007 (Competition in the broadcast television industry)

Form 3 Distant Carriage by Cable System

KATV - Little Rock, AR

2005



KATV
Little Rock, Arkansas
2005

Daybreak

One-hour weekday news program.

Daybreak – Early

One-hour weekday news program.

Good Morning Arkansas

One-hour weekday news program.

Mid-Day Arkansas

Half-hour mid-day news program.

Channel 7 News – Live at 5

Half-hour weekday evening news program.

Channel 7 News at 6

Half-hour weekday news program.

Channel 7 News – Nightside

Half-hour Sunday and weekday news program.

Saturday Daybreak

Two hour Saturday news program.

Channel 7 News at 10

Half-hour Saturday news program.

Channel 7 News – Saturday

Half-hour Saturday news program.

Channel 7 News – Sunday

Half-hour Sunday news program.

The Stan Heath Show

A weekly half-hour program produced with University of Arkansas Basketball Coach Stan Heath.

Razorback Football with Houston Nutt

A weekly program produced with University of Arkansas Razorback Football Coach Houston Nutt.

Clint Conque

Half-hour weekly show during the football season with University of Central Arkansas head football coach Clint Conque.

Jermaine Taylor Special

Special program about the Little Rock native and professional boxer who won the title of undisputed middleweight championship of the world in 2005

Saturday Morning Blitz

Weekly sports talk show.

KATV Weather Special

Coverage of special local and regional weather conditions.

Local Weather

Coverage of local weather.

SP Exhibit 22

CTV 04-05
Ex. 17

CALLSIGN	CALL-CITY	CALL-STATE	DISTANCE	PRIME-CITY	ST-PO	COUNTY
KTUL	Tulsa	OK	71	Ponca City	OK	Kay
KTUL	Tulsa	OK	59	Stillwater	OK	Payne
WCFT	Tuscaloosa	AL	94	Alexander City	AL	Tallapoosa
WJSU	Anniston	AL	80	Oneonta	AL	Blount
WHTM	Harrisburg	PA	50	Danville Boro	PA	Montour
WHTM	Harrisburg	PA	41	Sunbury City	PA	Northumberland
WJLA	Washington	DC	107	Cumberland	MD	Allegany
WJLA	Washington	DC	47	Carroll Co	MD	Carroll
WJLA	Washington	DC	79	Chambersburg	PA	Franklin
WJLA	Washington	DC	57	Spotsylvania Co	VA	Spotsylvania
WJLA	Washington	DC	111	Keyser	WV	Mineral

Source: Cable Data Corporation

CORRECTED
CTV 04-05
Ex. 18

KTUL
2005
Tulsa, Oklahoma

Good Day Tulsa

One-hour weekday news program.

Good Morning Oklahoma 1st News

One-hour weekday morning news program.

Good Morning Oklahoma

One-hour weekday morning news program.

News Channel 8 at 10:30 PM

Half-hour Sunday evening news program.

News Channel 8 at 4 PM

Half-hour afternoon news program.

News Channel 8 at 5 PM

Half-hour Sunday and weekday evening news program.

News Channel 8 at 6 PM

Half-hour evening news program.

News Channel 8 at 10 PM

Half-hour Monday through Saturday news program.

You Make the Call

Half-hour Sunday local sports call-in show featuring viewers' questions and comments.

WCFT/WJSU
2005
Montgomery (Anniston & Tuscaloosa), Alabama

ABC 33/40 Good Morning Alabama

Two-hour weekday morning news program.

ABC 33/40 News at Noon

Half-hour weekday news program.

ABC 33/40 News at 5 PM

Half-hour weekday evening news program.

ABC 33/40 News at 6 PM

Half-hour evening news program seven nights a week.

ABC 33/40 News at 10 PM

Half-hour evening news program seven nights a week.

ABC 33/40 Good Afternoon Alabama

Half-hour weekday afternoon news program.

ABC 33/40 The Zone

Half-hour fast-paced Sunday sports program.

**WJLA
2005
Washington, D.C.**

Capital Sunday

Half-hour Sunday news and public affairs program.

Choose to Save

PSA and station-produced news segments on basic personal finance.

Good Morning Washington at 5A

One-hour weekday news program.

Good Morning Washington at 6A

One-hour weekday news program.

Inside Washington

Half-hour Sunday political roundtable program.

News 7 @ Noon

Half-hour weekday news program

News 7 @ 5P

One-hour weekday news program.

News 7 @ 6P

Half-hour weekday and Saturday news program.

News 7 @ 6:30P

Half-hour Sunday news program.

News 7 @ 11P

Half-hour daily news program.

Wizards Magazine

Weekly, in-depth television magazine show that covers Washington Wizards players on and off the court.

WHTM
2005
Harrisburg, Pennsylvania

ABC27 Daybreak at 5:30 AM

Half-hour weekday morning news program.

ABC27 Daybreak at 6 AM

Half-hour weekday morning news program.

ABC27 News at Noon

Half-hour weekday news program.

ABC27 News Live at 5 PM

One hour weekday evening news program.

ABC27 News at 6 PM

Half-hour evening news program seven nights a week.

ABC27 News at 7 PM

Half-hour weekday evening news program.

ABC27 News at 11 PM

Half-hour evening news program seven nights a week.

World War II: Pennsylvania's Patriots

Weather Now

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<p style="text-align: right;">Page 946</p> <p style="text-align: center;">BEFORE THE COPYRIGHT ROYALTY JUDGES LIBRARY OF CONGRESS Washington, D.C.</p> <p>-----X</p> <p>In the Matter of:) Docket No: Distribution of the) 2007-3 CRB CD 2004-2005 2004 and 2005) Volume IV Cable Royalty Funds) Pgs. 946 - 1208 -----X</p> <p style="text-align: center;">Washington, D.C. Tuesday, October 13, 2009</p> <p>The following pages constitute the continued proceedings held in the above-captioned matter, held at the Library of Congress, Madison Building, 101 Independence Avenue, Southeast, Washington, D.C., before Cindy L. Sebo, RMR, CRR, CSR, RPR, of Capital Reporting Company, a Notary Public in and for the District of Columbia, beginning at approximately 9:30 a.m.</p>	<p style="text-align: right;">Page 948</p> <p>1 A P P E A R A N C E S (Continued): 2 On behalf of JOINT SPORTS CLAIMANTS: 3 ROBERT ALAN GARRETT, ESQUIRE 4 STEPHEN MARSH, ESQUIRE 5 Arnold & Porter, LLP 6 555 Twelfth Street, N.W. 7 Washington, D.C. 20004-1206 8 (202) 942-5444 9 10 On behalf of COMMERCIAL TELEVISION CLAIMANTS 11 GROUP: 12 JOHN I. STEWART, JR., ESQUIRE 13 ANN MACE, ESQUIRE 14 Crowell & Moring 15 1001 Pennsylvania Avenue, N.W. 16 Washington, D.C. 20004-2595 17 (202) 624-2685 18 19 20 21 22</p>
<p style="text-align: right;">Page 947</p> <p>1 A P P E A R A N C E S 2 Copyright Royalty Tribunal: 3 CHIEF JUDGE JAMES SLEDGE 4 JUDGE WILLIAM ROBERTS 5 JUDGE STANLEY C. WISNIEWSKI 6 7 On behalf of PROGRAM SUPPLIERS: 8 GREGORY O. OLANIRAN, ESQUIRE 9 LUCY HOLMES PLOVNICK, ESQUIRE 10 DENNIS LANE, ESQUIRE 11 Stinson Morrison Hecker LLP 12 1150 18th Street, N.W., Suite 800 13 Washington, D.C. 20036-3816 14 (202) 785-9100 15 16 On behalf of PUBLIC TELEVISION CLAIMANTS: 17 LINDSEY L. TONSAGER, ESQUIRE 18 Covington & Burling LLP 19 1201 Pennsylvania Avenue, N.W. 20 Washington, D.C. 20004-2401 21 (202) 662-5609 22</p>	<p style="text-align: right;">Page 949</p> <p>1 A P P E A R A N C E S (Continued): 2 On behalf of DEVOTIONAL CLAIMANTS: 3 ARNOLD P. LUTZKER, ESQUIRE 4 CAROLYN MARTIN, ESQUIRE 5 Lutzker & Lutzker LLP 6 1233 Twentieth Street, N.W., Suite 703 7 Washington, D.C. 20036 8 (202) 408-7600 9 10 On behalf of BROADCAST MUSIC, INC.: 11 JEFFREY J. LOPEZ, ESQUIRE 12 PHILIP J. MAUSE, ESQUIRE 13 Drinker Biddle & Reath LLP 14 1500 K Street, N.W. 15 Washington, D.C. 20005-1209 16 (202) 842-8465 17 18 19 20 21 22</p>

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<p>1 A P P E A R A N C E S (Continued):</p> <p>2 On behalf of AMERICAN SOCIETY OF COMPOSERS,</p> <p>3 AUTHORS AND PUBLISHERS (ASCAP):</p> <p>4 LYNN B. BAYARD, ESQUIRE</p> <p>5 JAYSON L. COHEN, ESQUIRE</p> <p>6 Paul, Weiss, Rifkind, Wharton & Garrison LLP</p> <p>7 1285 Avenue of the Americas</p> <p>8 New York, New York 10019-6064</p> <p>9 (212) 373-3054</p> <p>10 -and-</p> <p>11 SAMUEL MOSENKIS, ESQUIRE</p> <p>12 American Society of Composers, Authors</p> <p>13 & Publishers (ASCAP)</p> <p>14 ASCAP Building</p> <p>15 One Lincoln Plaza</p> <p>16 New York, New York 10023</p> <p>17 (212) 621-6450</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p>	<p>1 C O N T E N T S</p> <p>2 OPENING STATEMENTS PAGE:</p> <p>3 On behalf of Music Claimants, BMI,</p> <p>4 ASCAP and SESAC 1000</p> <p>5</p> <p>6 WITNESSES: PAGE:</p> <p>7 JERALD N. FRITZ</p> <p>8 Examination on Qualifications by Mr. Stewart 959</p> <p>9 Direct Examination by Mr. Stewart 964</p> <p>10 Cross-Examination by Ms. Holmes-Plovnick 975</p> <p>11 Redirect Examination by Mr. Stewart 997</p> <p>12</p> <p>13 SETH SALTZMAN</p> <p>14 Direct Examination by Ms. Bayard 1010</p> <p>15 Cross-Examination by Ms. Holmes-Plovnick 1027</p> <p>16 Cross-Examination by Mr. Volin 1042</p> <p>17</p> <p>18 MICHAEL O'NEILL</p> <p>19 Direct Examination by Mr. Lopez 1076</p> <p>20 Cross-Examination by Ms. Holmes-Plovnick 1094</p> <p>21 Redirect Examination by Mr. Lopez 1126</p> <p>22</p>
Page 951	Page 953
<p>1 A P P E A R A N C E S (Continued):</p> <p>2 On behalf of SESAC:</p> <p>3 JOHN C. BEITER, ESQUIRE</p> <p>4 Zumwalt, Almon & Hayes PLLC</p> <p>5 Music Row, 1014 Sixteenth Avenue South</p> <p>6 Nashville, Tennessee 37212</p> <p>7 (615) 850-2291</p> <p>8</p> <p>9 On behalf of CANADIAN CLAIMANTS GROUP</p> <p>10 L. KENDALL SATTERFIELD, ESQUIRE</p> <p>11 RICHARD M. VOLIN, ESQUIRE</p> <p>12 Finkelstein Thompson LLP</p> <p>13 1050 Thirtieth Street, N.W.</p> <p>14 Washington, D.C. 20007</p> <p>15 (202) 337-8000</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p>	<p>1 WITNESSES: PAGE:</p> <p>2 WILLIAM P. ZARAKAS</p> <p>3 Examination on Qualifications by Mr. Mause 1131</p> <p>4 Direct Examination by Mr. Mause 1137</p> <p>5 Cross-Examination by Mr. Lane 1159</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p>

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Page 954				Page 956			
1	EXHIBITS	MARKED	ADMITTED	1	that's -- that's the -- the time frames.		
2	Settling Parties 19	962	964	2	We've discussed it, and I think that,		
3	Settling Parties 20	965	967	3	should the alarm go off at around 11:00 or so this		
4	Settling Parties 21	965	967	4	morning, we would simply recess until 1:00. And		
5	Settling Parties 22	970	971	5	if it is this afternoon, if it's -- it goes off at		
6	Settling Parties 23	970	972	6	any time 3:00 or thereafter, we will simply recess		
7	Settling Parties 24	1009	1009	7	for the day. If it is at an earlier time, we're		
8	Settling Parties 25	1014	1015	8	obviously going to want to come back and		
9	Settling Parties 26	1080	1082	9	reassemble.		
10	Settling Parties 27	1137	1138	10	This evacuation is not simply to go		
11				11	outside and stand on the street corner as a normal		
12				12	evacuation. We are expected to evacuate to the		
13	EXHIBITS	MARKED	ADMITTED	13	Folger Park. Folger Park is on the corner of		
14	Program Suppliers 2X	1161	1163	14	Second Street and D Street.		
15	Program Suppliers 3X	1163	1169	15	Our evacuation access is exiting this		
16	Program Suppliers 4X	1172	----	16	room. And the elevators, of course, will not be		
17	Program Suppliers 5X	1177	1182	17	operative as the fire alarm is going off, so you		
18				18	will be taking the stairs all the way down to the		
19				19	ground floor, exiting out on the First Street		
20	(*Exhibits Retained by Counsel.)			20	side, and then walk down First Street to D Street,		
21				21	and if you turn left on to D Street and go over		
22				22	one block, diagonally across the street from there		
Page 955				Page 957			
1	PROCEEDINGS			1	will be Folger Park.		
2	CHIEF JUDGE SLEDGE: Good morning.			2	If we have that -- for instance, if it		
3	We'll come to order.			3	happens in the next half an hour or 45 minutes,		
4	As we begin this morning, Judge Roberts			4	we -- that's the way that we will go.		
5	has an announcement.			5	I would encourage all of you to try to		
6	JUDGE ROBERTS: Good morning, everyone.			6	stick with us as we go down and go out to the		
7	The Library of Congress has scheduled a			7	park, because if you don't -- you don't have to,		
8	building evacuation drill. The drill is either			8	but if you don't, if you choose to go out and get		
9	going to be today, which, of course, is the day we			9	a cup of coffee or go somewhere else, you're not		
10	would have to worry about, or November the 9th is			10	going to know when we're going to reassemble and		
11	the other day that they're going to be using. We			11	continue with the proceeding today, because I		
12	are not sure what buildings they are going to			12	can't tell you how long this evacuation is going		
13	evacuate today and what buildings that we are --			13	to last.		
14	are going to be evacuated on the 9th of November.			14	I'm presuming it's probably going to be		
15	We, however, do have one liability with			15	at least an hour total time, but it may be -- it		
16	respect to the chances of it being today, and that			16	may be more than that.		
17	is that we have Bob Garrett in the room, and so			17	And, again, if we get to 11:00 or close		
18	that probably almost guarantees us that the alarm			18	thereto, we will simply recess until 1:00. If		
19	is going to go off today.			19	it's 3:00 or thereafter, we will recess for the		
20	MR. GARRETT: I'll leave.			20	day.		
21	JUDGE ROBERTS: They tell us it's going			21	Now, if the alarm does go off today, of		
22	to go off at midmorning or midafternoon. So			22	course, we have the question of lost time to the		

3 (Pages 954 to 957)

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<p style="text-align: right;">Page 958</p> <p>1 proceedings.</p> <p>2 We will not be able to go later today,</p> <p>3 but we are -- and it wouldn't make that much</p> <p>4 sense, either, if the alarm turns out to be in the</p> <p>5 afternoon period.</p> <p>6 But we are open to your suggestions as</p> <p>7 to how you wish to handle the lost time that would</p> <p>8 result from this evacuation if it does occur</p> <p>9 today.</p> <p>10 So I open up the floor for anyone who</p> <p>11 has thoughts as to whether you would like to go</p> <p>12 later tomorrow or to start half an hour earlier</p> <p>13 the next two mornings. If anyone has any</p> <p>14 thoughts.</p> <p>15 CHIEF JUDGE SLEDGE: Judge, let me</p> <p>16 suggest -- we're not sure it'll even happen</p> <p>17 today -- why don't you all talk. If we have a</p> <p>18 thing today, talk, then give us some -- some</p> <p>19 announcement in the morning.</p> <p>20 JUDGE ROBERTS: Fair enough.</p> <p>21 And just keep your fingers crossed that</p> <p>22 we get through today, and if we do, then for</p>	<p style="text-align: right;">Page 960</p> <p>1 A. Jerald Fritz.</p> <p>2 Q. What is your current position?</p> <p>3 A. I'm the senior vice president for legal</p> <p>4 and strategic affairs for</p> <p>5 Allbritton Communications Company.</p> <p>6 Q. And does Allbritton Communications</p> <p>7 Company own and operate television stations?</p> <p>8 A. We have eight television stations in</p> <p>9 seven markets.</p> <p>10 Q. How long have you been involved in the</p> <p>11 television industry?</p> <p>12 A. This is my 41st year in and around the</p> <p>13 broadcasting business.</p> <p>14 Q. What kinds of work have you done in</p> <p>15 television?</p> <p>16 A. Virtually all types of work in the</p> <p>17 stations. I've reported news. I've written</p> <p>18 promotions. I've worked in production in -- in</p> <p>19 front of the camera, behind the camera.</p> <p>20 I've sold time and I've bought time.</p> <p>21 I've worked in finance and administration. And</p> <p>22 I've negotiated and -- I've produced programming</p>
<p style="text-align: right;">Page 959</p> <p>1 purposes of this proceeding, we're fine, and we</p> <p>2 won't have an evacuation.</p> <p>3 CHIEF JUDGE SLEDGE: Thank you.</p> <p>4 Always something exciting in the</p> <p>5 Library of Congress.</p> <p>6 All right. Our next witness is</p> <p>7 Dr. Fritz.</p> <p>8 MR. STEWART: Thank you, Your Honor.</p> <p>9 Commercial Television Claimants calls</p> <p>10 their next witness, Mr. Jerald Fritz.</p> <p>11 CHIEF JUDGE SLEDGE: Thank you.</p> <p>12 WHEREUPON,</p> <p>13 JERALD N. FRITZ</p> <p>14 was called as a witness and, having been first</p> <p>15 duly sworn, was examined and testified</p> <p>16 as follows:</p> <p>17 CHIEF JUDGE SLEDGE: Thank you.</p> <p>18 Please be seated.</p> <p>19 EXAMINATION ON QUALIFICATIONS</p> <p>20 BY MR. STEWART:</p> <p>21 Q. Would you state your full name,</p> <p>22 please?</p>	<p style="text-align: right;">Page 961</p> <p>1 and I've negotiated contracts for syndication</p> <p>2 contracts and the distribution of those</p> <p>3 contracts.</p> <p>4 Q. What's your educational background,</p> <p>5 Mr. Fritz?</p> <p>6 A. I have a television degree from</p> <p>7 Northwestern University. I have a law degree from</p> <p>8 Notre Dame, with a concentration in communications</p> <p>9 law, both domestically and internationally.</p> <p>10 Q. Have you held positions during this</p> <p>11 last 40 years in Government or in industry</p> <p>12 organizations?</p> <p>13 A. Yes. I've worked three different times</p> <p>14 at the Federal Communications Commission, both in</p> <p>15 the -- what's now called the Mass Media Bureau, it</p> <p>16 used to be called the Broadcast Bureau, and in</p> <p>17 various commissioners' offices, most recently as</p> <p>18 chief of staff to the chairman of the FCC.</p> <p>19 In addition to my Government service,</p> <p>20 I've also held positions in -- in the industry. I</p> <p>21 served as a director of the National Association</p> <p>22 of Broadcasters and in several other related</p>

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<p style="text-align: right;">Page 962</p> <p>1 communications law capacities. 2 Q. Now, did you provide written testimony 3 for use in this proceeding? 4 A. I did. 5 MR. STEWART: May I approach the 6 witness, Your Honor? 7 CHIEF JUDGE SLEDGE: Yes. 8 (Settling Parties Exhibit No. 19 was 9 marked for identification.) 10 MR. STEWART: I have had marked as 11 SP Exhibit 19 a document entitled, Testimony of 12 Jerald N. Fritz, dated June 1, 2009, Corrected 13 October 1, 2009, which has been filed with the 14 Board and exchanged with the other parties here. 15 BY MR. STEWART: 16 Q. Mr. Fritz, would you take a look at 17 SP Exhibit 19, please? 18 Have you had a chance to look at it? 19 A. Yes. 20 Q. Is this your written testimony? 21 A. It is. 22 Q. Do you have any corrections to</p>	<p style="text-align: right;">Page 964</p> <p>1 CHIEF JUDGE SLEDGE: Any objection to 2 the exhibit? 3 (Pause.) 4 CHIEF JUDGE SLEDGE: Without objection, 5 it's admitted. 6 (Settling Parties Exhibit No. 19 was 7 admitted into evidence.) 8 DIRECT EXAMINATION 9 BY MR. STEWART: 10 Q. Now, Mr. Fritz, what kinds of programs 11 do television stations typically produce 12 themselves? 13 A. Television stations produce various 14 types of programmings, primarily local news, but 15 other public affairs programming, including Sunday 16 talk shows; sports programming; coaches shows; 17 pregame shows; postgame shows; postseason shows; 18 we produce weather specials and -- and the like. 19 Q. And turning to Pages -- to Page 3 and 20 over to Page 5 of SP Exhibit 19, you provide 21 specific examples of Allbritton stations' programs 22 there; is that correct?</p>
<p style="text-align: right;">Page 963</p> <p>1 SP Exhibit 19? 2 A. No. 3 Q. And turning to the Appendix 1 at the 4 back of Exhibit SP -- SP Exhibit 19, is this your 5 CV or bio? 6 A. It is. 7 Q. And does this provide further details 8 about your publications, experience and 9 qualifications? 10 A. It does. 11 MR. STEWART: Your Honor, I would like 12 to proffer Mr. Fritz as an expert and, in 13 particular, as an expert in television station 14 operations and programming. 15 CHIEF JUDGE SLEDGE: Any objection to 16 the proffer? 17 (Pause.) 18 CHIEF JUDGE SLEDGE: Without objection, 19 it's accepted. 20 MR. STEWART: And, Your Honor, I'd move 21 at this time for the admission of SP Exhibit 19 22 into evidence.</p>	<p style="text-align: right;">Page 965</p> <p>1 A. It is. 2 MR. STEWART: Your Honor, may I 3 approach the witness? 4 CHIEF JUDGE SLEDGE: Yes, sir. 5 (Settling Parties Exhibit Nos. 20 and 6 21 were marked for identification.) 7 MR. STEWART: I have had marked for 8 identification as SP Exhibit 20 a map that was 9 previously exchanged with the parties bearing the 10 designation CTV Exhibit 15, and a second document 11 which I've marked for identification as 12 Exhibit 20 -- SP Exhibit 21, a two-page document 13 that was previously filed as CTV '04-'05 14 Exhibit 16, which is -- has been marked for 15 identification in corrected form. 16 BY MR. STEWART: 17 Q. And, Mr. Fritz, would you please look 18 at SP Exhibit 20 first? 19 What does that exhibit show? 20 A. SP 20 is a graphic illustration of the 21 Little Rock designated market area as defined by 22 the ACNielsen Company with surrounding DMAs with</p>

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<p style="text-align: right;">Page 966</p> <p>1 the State of Arkansas for -- and listing and 2 indicating cable systems outside the Little Rock 3 DMA that carry KATV programming. 4 The dotted line is a graphic 5 illustration of the 150-mile radius around 6 Little Rock, and this was for 2005. 7 Q. And would you look at SP Exhibit 21, 8 please, and tell me what does that show? 9 A. These are locally produced programs by 10 KATV in 2005. 11 Q. And what's the source of the 12 information going back to SP Exhibit 20? 13 A. This is counsel-produced programming -- 14 counsel-produced exhibit. 15 Q. What's your understanding of the source 16 of the information depicted on Exhibit 20? 17 A. The source of the information, it's my 18 understanding it's cable data supplied by the 19 cable systems. 20 MR. STEWART: Your Honor, I would move 21 for the admission of SP Exhibit 20 at this time. 22 CHIEF JUDGE SLEDGE: Any objection to</p>	<p style="text-align: right;">Page 968</p> <p>1 Q. Okay. And did you -- prior to being 2 asked to testify in this proceeding, did you know 3 the locations of cable systems that carried 4 KATV as a distant signal outside of Little Rock 5 DMA? 6 A. I did not. 7 Q. Why not? 8 A. It was no relevance to us. 9 Q. So, taken together, SP Exhibit 21, 10 along with the map, SP Exhibit 20, what do those 11 illustrate, from your perspective? 12 A. Locally produced programming by KATV 13 that would be of interest to those people living 14 outside the KATV DMA but adjacent to the KATV with 15 a high interest in this type of programming. 16 Q. And why, in your opinion, would they -- 17 would there be high interest in this program 18 outside the Little Rock DMA itself? 19 A. KATV and the Little Rock DMA, unlike 20 other DMAs, is -- has certain characteristics, 21 including being the State Capitol and including 22 being the largest city in the state, the state not</p>
<p style="text-align: right;">Page 967</p> <p>1 Exhibit 20? 2 (Pause.) 3 CHIEF JUDGE SLEDGE: Without objection, 4 it's admitted. 5 (Settling Parties Exhibit No. 20 was 6 admitted into evidence.) 7 MR. STEWART: And, Your Honor, I'd move 8 for the admission of SP Exhibit 21 at this time. 9 CHIEF JUDGE SLEDGE: Any objection to 10 Exhibit 21? 11 (Pause.) 12 CHIEF JUDGE SLEDGE: Without objection, 13 it's admitted. 14 (Settling Parties Exhibit No. 21 was 15 admitted into evidence.) 16 BY MR. STEWART: 17 Q. All right, Mr. Fritz, let's first look 18 at SP Exhibit 20, the map. 19 Now, the -- the tan area depicted in 20 the middle, that's the Little Rock -- Little Rock 21 DMA; is that correct? 22 A. Correct.</p>	<p style="text-align: right;">Page 969</p> <p>1 having any -- excuse me, any professional sporting 2 teams. 3 So the University of Arkansas is 4 everything, in terms of sports programming, to the 5 people of Arkansas. 6 The programming that KATV produces is 7 of -- within the state is of high interest to 8 people even outside Little Rock. 9 Q. Well -- and could you be more specific? 10 What kind of programming produced by KATV would be 11 of interest -- would be of interest? 12 A. Certainly, all the Razorback 13 programming; the sports programming; the news 14 programming from the State Capitol; and coaches 15 programs; the -- the -- anything relating to 16 sports; anything relating to news from the 17 State Capitol; and certainly the weather. 18 KATV has a very sophisticated weather 19 center, and, being the largest city in the market, 20 provides exceptional weather coverage for both the 21 tornado alley and the hurricane alley that goes 22 through the State of Arkansas.</p>

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<p style="text-align: right;">Page 970</p> <p>1 MR. STEWART: Your Honor, may I 2 approach the witness? 3 CHIEF JUDGE SLEDGE: Yes. 4 (Settling Parties Exhibit Nos. 22 and 5 23 were marked for identification.) 6 MR. STEWART: Your Honor, I have had 7 marked for identification SP Exhibit 22, a 8 one-page document that had previously been 9 identified CTV '04-'05 Exhibit 17. 10 And I have had marked for 11 identification as SP Exhibit 23 a four-page 12 document that had previously been identified as 13 CTV '04-'05 Exhibit 18 corrected -- and I've 14 identified the corrected version of that exhibit 15 as SP Exhibit 23. 16 BY MR. STEWART: 17 Q. It pains me to do this, Mr. Fritz, but 18 could you first look at SP Exhibit 23? 19 A. Yes. 20 Q. And it's corrected, but do you have any 21 further corrections to make to that? 22 A. Just one minor correction. On Page 2,</p>	<p style="text-align: right;">Page 972</p> <p>1 to the correction the witness has just made on the 2 stand with respect to the market name identified 3 at the top of Page 2. It should read Birmingham, 4 rather than Montgomery, Alabama. 5 CHIEF JUDGE SLEDGE: Any objection to 6 Exhibit 23? 7 (Pause.) 8 CHIEF JUDGE SLEDGE: Without objection, 9 it's admitted. 10 (Settling Parties Exhibit No. 23 was 11 admitted into evidence.) 12 BY MR. STEWART: 13 Q. So, Mr. Fritz, looking at Exhibit 22, 14 what does that exhibit show? 15 A. Exhibit 22 reflects the -- several 16 other Allbritton-owned stations and their 17 locations and cable systems outside the respective 18 markets that carry the -- the programming from 19 those stations. 20 Q. And are these -- are the cable systems 21 and the counties that are identified on the 22 right-hand side of this, to your knowledge,</p>
<p style="text-align: right;">Page 971</p> <p>1 at the top, WCFT/WJSU, the reference to Montgomery 2 should obviously be to Birmingham. 3 Q. Do you have any other corrections to 4 SP Exhibit 23? 5 A. No. 6 Q. I'm sorry, could you repeat your 7 answer? 8 A. No. 9 Q. And do you have any corrections to 10 SP Exhibit 22? 11 A. No. 12 MR. STEWART: Your Honor, at this time 13 I would move for the admission of SP Exhibit 22. 14 CHIEF JUDGE SLEDGE: Any objection to 15 Exhibit 22? 16 (Pause.) 17 CHIEF JUDGE SLEDGE: Without objection, 18 it's admitted. 19 (Settling Parties Exhibit No. 22 was 20 admitted into evidence.) 21 MR. STEWART: And, Your Honor, I would 22 move for the admission of SP Exhibit 23, subject</p>	<p style="text-align: right;">Page 973</p> <p>1 located in counties that are close by the DMA of 2 the station being retransmitted as a distant 3 signal? 4 A. They are all adjacent to the respective 5 DMAs. 6 Q. All right. And turning to Exhibit 23, 7 and looking at the WJLA page, that's here in 8 Washington -- that station is here in 9 Washington, D.C; is that correct? 10 A. That's correct. 11 Q. And if you look at it in conjunction 12 with SP Exhibit 22, in your view, why would cable 13 operators outside the Washington DMA or market be 14 interested in the program -- in the kinds of 15 programs that are listed on Page 3 of 16 SP Exhibit 23? 17 A. Well, the WJLA programming is primarily 18 news programming, and there are many, many people 19 who live outside the Washington DMA that commute 20 into Washington and that have a high -- and who 21 have a high interest in the programming from 22 the -- the Nation's Capitol and surrounding</p>

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<p style="text-align: right;">Page 974</p> <p>1 areas.</p> <p>2 For example, the -- one of my</p> <p>3 colleagues, who's one of the accounting managers,</p> <p>4 lives down in Spotsylvania County --</p> <p>5 Spotsylvania County, south of Washington. She</p> <p>6 has -- she works every day in town and has a high</p> <p>7 interest in both the news programming, the weather</p> <p>8 programming, the sports programming that WJLA</p> <p>9 carries.</p> <p>10 Q. Now, Mr. Fritz, based on your</p> <p>11 experience in the television industry, are the</p> <p>12 programs, the sort of range of programs produced</p> <p>13 by the Allbritton stations that you've presented</p> <p>14 here, unique as opposed to -- as compared with</p> <p>15 other stations that are carried as distant signals</p> <p>16 in the 2004-2005 period?</p> <p>17 A. They're fairly typical.</p> <p>18 MR. STEWART: Thank you. I have no</p> <p>19 further questions.</p> <p>20 CHIEF JUDGE SLEDGE: Cross-examination</p> <p>21 of Mr. Fritz.</p> <p>22</p>	<p style="text-align: right;">Page 976</p> <p>1 And did that include selling ad</p> <p>2 spots --</p> <p>3 A. Yes.</p> <p>4 Q. -- for television stations?</p> <p>5 And both purchasing and selling; you</p> <p>6 mentioned that?</p> <p>7 A. Yes.</p> <p>8 Q. So based on that experience, you have a</p> <p>9 basic understanding of the business model for a</p> <p>10 broadcast station?</p> <p>11 A. I do.</p> <p>12 Q. You do.</p> <p>13 And would that be essentially, just for</p> <p>14 me to do a very brief summary, that the -- the</p> <p>15 broadcast station purchases programs and then they</p> <p>16 try to sell advertising time within the program to</p> <p>17 cover the cost of the program; is that right?</p> <p>18 A. That's one example. There are many</p> <p>19 examples. You posited the example of a broadcast</p> <p>20 station purchasing program, but broadcast stations</p> <p>21 get programming several different ways: They</p> <p>22 produce it, they purchase it, they get it from the</p>
<p style="text-align: right;">Page 975</p> <p>1 CROSS-EXAMINATION</p> <p>2 BY MS. HOLMES-PLOVNICK:</p> <p>3 Q. Hi, I'm Lucy Holmes-Plovnick. I'm</p> <p>4 counsel for the Program Suppliers.</p> <p>5 Good morning, Mr. Fritz.</p> <p>6 A. Good morning.</p> <p>7 Q. Now, I would start -- I'd like to talk</p> <p>8 to you a little bit about your experience working</p> <p>9 with broadcast stations.</p> <p>10 And if you look on Page 1 of your</p> <p>11 testimony -- you just mentioned it here, now,</p> <p>12 too -- you specifically said that you worked for</p> <p>13 41 years in and around the broadcasting business;</p> <p>14 that's correct?</p> <p>15 A. Right.</p> <p>16 Q. That's correct?</p> <p>17 A. Right.</p> <p>18 Q. And you specifically mentioned</p> <p>19 experience with advertising sales and</p> <p>20 purchasing?</p> <p>21 A. Yes.</p> <p>22 Q. That's right?</p>	<p style="text-align: right;">Page 977</p> <p>1 networks; several different ways.</p> <p>2 Q. But regardless of how they acquire the</p> <p>3 programming, they do sell time within the</p> <p>4 programming in order to -- to advertisers, and</p> <p>5 then they want to try to recoup costs expended or</p> <p>6 spent if they acquired it --</p> <p>7 A. That's correct.</p> <p>8 Q. -- that's correct?</p> <p>9 Okay. And on Page 2 of your testimony,</p> <p>10 at the bottom of the page, the very last sentence</p> <p>11 on that page that goes into the next page,</p> <p>12 starting with the word, The availability.</p> <p>13 Could you please read that into the</p> <p>14 record?</p> <p>15 A. The availability of a deeper</p> <p>16 advertising base in larger television markets</p> <p>17 generally permits stations in those markets to</p> <p>18 support the resources needed to produce higher</p> <p>19 quality, more frequent and broader appeal</p> <p>20 programming, but even stations in the smallest</p> <p>21 markets provide news and informational programming</p> <p>22 available from no other provider.</p>

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<p style="text-align: right;">Page 978</p> <p>1 Q. Now, I wanted to direct your attention</p> <p>2 specifically when you talked about a deeper</p> <p>3 advertising base in a larger television market.</p> <p>4 When you talk about the deeper</p> <p>5 advertising base, are you limiting that to the</p> <p>6 DMA, or are you also thinking about the larger</p> <p>7 area that -- as you talked about, the regional</p> <p>8 appeal for -- especially for local programming,</p> <p>9 where it would have a larger base even in the</p> <p>10 distant signal area?</p> <p>11 A. No. I'm talking about the DMA.</p> <p>12 Q. You're talking about the DMA</p> <p>13 specifically.</p> <p>14 So if you could look at SP Exhibit 20.</p> <p>15 The tan area there is the DMA, correct?</p> <p>16 A. The Little Rock DMA, right.</p> <p>17 Q. Right.</p> <p>18 So -- and this would be a situation</p> <p>19 where you talked about how Little Rock -- you were</p> <p>20 talking before about WJLA, but Little Rock is also</p> <p>21 the capitol of Arkansas, correct?</p> <p>22 A. Correct.</p>	<p style="text-align: right;">Page 980</p> <p>1 Q. You get no credit in terms of the</p> <p>2 reports you get from Nielsen?</p> <p>3 A. Correct.</p> <p>4 Q. Now, I'd like to turn to Page 4 of your</p> <p>5 testimony. And you just mentioned Nielsen</p> <p>6 about -- in the first full paragraph on that page,</p> <p>7 about one, two -- about four lines down, you say</p> <p>8 that KATV's news has been ranked highest in all</p> <p>9 day parts by the entire State of Arkansas by</p> <p>10 Nielsen, correct?</p> <p>11 A. In the entire state, correct.</p> <p>12 Q. In the entire state, yes.</p> <p>13 And when you say "the entire state,"</p> <p>14 that is including the areas that are outside the</p> <p>15 DMA for Little Rock?</p> <p>16 A. It would clearly be the number one</p> <p>17 within the DMA, and because the DMA is so much</p> <p>18 larger than the other DMAs in the state, it would,</p> <p>19 by necessity, also be the largest viewer share in</p> <p>20 the entire state.</p> <p>21 Q. But you didn't look at specific numbers</p> <p>22 for anything other than the DMA --</p>
<p style="text-align: right;">Page 979</p> <p>1 Q. So there would be commuters and people</p> <p>2 who would commute into Little Rock.</p> <p>3 So -- and you said here that the cable</p> <p>4 systems that are in Arkansas outside of the DMA</p> <p>5 would receive KATV as a distant signal --</p> <p>6 A. Correct.</p> <p>7 Q. -- correct?</p> <p>8 So advertising on KATV wouldn't --</p> <p>9 would reach those viewers as well, correct, that</p> <p>10 are in -- outside the DMA?</p> <p>11 A. The advertising would reach them,</p> <p>12 right.</p> <p>13 Q. So would this be a regional market for</p> <p>14 that advertising?</p> <p>15 A. The viewers and the people who view</p> <p>16 the -- the -- the programming on systems outside</p> <p>17 the DMA would be useless to KATV. We don't get</p> <p>18 numbers for those. We only can rely and sell the</p> <p>19 numbers for the DMA. Nielsen reports the DMA</p> <p>20 numbers, and that's what we sell.</p> <p>21 So to the extent that other people view</p> <p>22 it, we get no credit for that.</p>	<p style="text-align: right;">Page 981</p> <p>1 A. Correct.</p> <p>2 Q. -- correct?</p> <p>3 Now, you mentioned in this sentence the</p> <p>4 term "day part."</p> <p>5 Could you define day part for the</p> <p>6 Judges?</p> <p>7 A. Day parts are segments of the day</p> <p>8 that -- that broadcasters sell.</p> <p>9 For example, the overnight, which would</p> <p>10 be from, say, 2:00 in the morning till 5:00 in the</p> <p>11 morning.</p> <p>12 The early morning would be -- the 5:00</p> <p>13 would include things like Good Morning America or</p> <p>14 the local news.</p> <p>15 Then you'd hit some maybe -- a local</p> <p>16 programming like Good Morning Alabama or</p> <p>17 Good Morning Arkansas, Good Morning Washington.</p> <p>18 Then you go into local syndicated programming in</p> <p>19 the morning.</p> <p>20 The -- the afternoon newscast, soap</p> <p>21 operas in the afternoon, daytime, what we call</p> <p>22 early access, that time just before the local</p>

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<p style="text-align: right;">Page 982</p> <p>1 news, the evening news; then prime time, which 2 would be in the evening; and then late night 3 programming. 4 Those are day parts peculiar to the 5 television industry. 6 Q. Now, are some day parts more valuable 7 than others? 8 A. Yes. 9 Q. For example, prime time is more 10 valuable than 2:00 in the morning? Didn't you 11 mention that one? 12 A. Clearly. 13 Q. Clearly. 14 CHIEF JUDGE SLEDGE: That's confusing 15 to me. What do you mean by "valuable"? 16 BY MS. HOLMES-PLOVNICK: 17 Q. Well, more valuable to a broadcast 18 station? 19 A. A broadcaster can sell the time 20 associated with commercials in prime time 21 programming for much more money. They can sell 22 commercials overnight.</p>	<p style="text-align: right;">Page 984</p> <p>1 times of day, you would be selling it to an 2 advertiser, correct? 3 (Evacuation alarm interrupts the 4 proceedings.) 5 CHIEF JUDGE SLEDGE: It doesn't sound 6 good. 7 (Mandatory evacuation drill of the 8 Madison Building from 10:01 a.m. until 11:16 a.m.) 9 CHIEF JUDGE SLEDGE: Thank you. We'll 10 come to order. 11 BY MS. HOLMES-PLOVNICK: 12 Q. Again, for the record, I'm 13 Lucy Holmes-Plovnick on behalf of 14 Program Suppliers. 15 And before the fire alarm and the 16 recess, Mr. Fritz, we were talking about a couple 17 different things, but one of them was Nielsen 18 ratings that you mention in your testimony, and 19 you testified that the local news program you were 20 talking about was the most highly rated in the 21 State of Arkansas. 22 Now, are Arkansas -- are Nielsen</p>
<p style="text-align: right;">Page 983</p> <p>1 Similarly, broadcasters in their local 2 news programming can -- can charge more and get to 3 keep all of those commercials. 4 Most of the commercials associated with 5 prime time are not -- do not belong to the local 6 broadcaster, they belong to the network. That's 7 the network-affiliate relationship. We get the 8 programming from the network, but the network 9 keeps all the money from the spots. 10 Q. And -- 11 CHIEF JUDGE SLEDGE: I suspect that you 12 meant that. But there are many other measures of 13 value that would value the late night much more 14 than the midday or the prime time? 15 THE WITNESS: I appreciate the 16 clarification. 17 BY MS. HOLMES-PLOVNICK: 18 Q. Now, just to follow up on that. 19 So -- strike that, I'm sorry. 20 When you talk about value to the 21 advertiser -- to the broadcast station and -- in 22 terms of you're talking about selling at different</p>	<p style="text-align: right;">Page 985</p> <p>1 ratings something that you look at as a 2 broadcaster? 3 A. Yes. 4 Q. And do you look at them for particular 5 demographic groups? 6 A. Yes. 7 Q. Are some demographic groups more 8 important than other demographic groups to you as 9 a broadcaster? 10 A. Yes. 11 Q. Which ones would you say are the most 12 important? 13 A. It depends on the program. If it's a 14 sporting program, adults 25 to 54; if it's the 15 news program -- or men 25 to 54; if it's a news 16 program, it might be adults 25 to 54; if it's a 17 children's programming, you know, it would be 18 children 12 and up, so . . . 19 It depends on the program. 20 Q. It depends on the program. 21 What about for, like, a nonnetwork 22 first run syndicated show like Oprah Winfrey Show</p>

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<p style="text-align: right;">Page 986</p> <p>1 what demographic would that attract?</p> <p>2 A. That would attract women 18 to 49.</p> <p>3 Q. Women 18 to 49.</p> <p>4 Now, in your stations, the ones that</p> <p>5 you testified about, those are all network</p> <p>6 affiliates, right?</p> <p>7 A. Yes.</p> <p>8 Q. So they carry network programming for a</p> <p>9 portion of the day --</p> <p>10 A. Correct.</p> <p>11 Q. -- right?</p> <p>12 They also carry nonnetwork programming</p> <p>13 as well, correct?</p> <p>14 A. That's correct as well.</p> <p>15 Q. And station-produced programming, as</p> <p>16 you testified, as well?</p> <p>17 A. Yes.</p> <p>18 Q. So when I talk about The Oprah Winfrey</p> <p>19 Show, that is a show that is not a network show,</p> <p>20 correct?</p> <p>21 A. Correct.</p> <p>22 Q. Is The Oprah Winfrey Show a highly</p>	<p style="text-align: right;">Page 988</p> <p>1 the purchase of programming.</p> <p>2 What are factors that you look at as a</p> <p>3 broadcaster when you are negotiating the purchase</p> <p>4 of programming?</p> <p>5 A. The primary consideration is the return</p> <p>6 on investment that you can make when acquiring the</p> <p>7 program. How much the program will cost you to</p> <p>8 acquire it, either in direct costs or in barter</p> <p>9 that you have to give up, versus how much you can</p> <p>10 expect to obtain in revenue associated with the</p> <p>11 programming.</p> <p>12 It depends on the market. It depends</p> <p>13 on the -- the -- what's available, who else is --</p> <p>14 is negotiating for the programming, what other</p> <p>15 bids, what relationships you have with the</p> <p>16 syndicator. There are a number of different</p> <p>17 factors.</p> <p>18 Q. Well, one of those factors, you</p> <p>19 mentioned revenue that you would get from the</p> <p>20 programming.</p> <p>21 Would that revenue mostly be from</p> <p>22 advertising sales in the programming or --</p>
<p style="text-align: right;">Page 987</p> <p>1 rated show?</p> <p>2 A. Yes.</p> <p>3 Q. And do you know if it is, in fact,</p> <p>4 carried on any of the stations that you talked</p> <p>5 about in your testimony, like KATV?</p> <p>6 A. It's carried on WJLA. I'm not sure</p> <p>7 whether it's carried on KATV or not.</p> <p>8 Q. You also talked about experience you</p> <p>9 had in programming -- let me just say this</p> <p>10 question.</p> <p>11 So you testified that you had</p> <p>12 experience in selecting syndicated programming for</p> <p>13 broadcast stations or purchasing it or -- could</p> <p>14 you please tell me what your experience is in that</p> <p>15 regard?</p> <p>16 A. I've had several different experiences</p> <p>17 with programming. I've produced programming.</p> <p>18 I've negotiated for the acquisition of</p> <p>19 programming. I've sold programming.</p> <p>20 I've done many different things with</p> <p>21 respect to programming.</p> <p>22 Q. Let's talk about the negotiation for</p>	<p style="text-align: right;">Page 989</p> <p>1 A. Yes.</p> <p>2 Q. So you think about the advertising --</p> <p>3 the appeal of that programming to advertisers when</p> <p>4 you're or -- when you are trying to do this</p> <p>5 transaction; is that correct?</p> <p>6 A. Yes.</p> <p>7 Q. So when you're -- strike that.</p> <p>8 Is one of the factors that you think</p> <p>9 about when you think about appeal to advertisers</p> <p>10 how large your audience would be?</p> <p>11 A. Yes.</p> <p>12 Q. And what kind of audience that would be</p> <p>13 for the particular program?</p> <p>14 A. Yes.</p> <p>15 Q. Now, when you program for one of these</p> <p>16 stations, like KATV, when you're producing, either</p> <p>17 trying to buy shows or whether they're</p> <p>18 station-produced shows, are you trying to program</p> <p>19 for a regional audience?</p> <p>20 A. No.</p> <p>21 Q. No.</p> <p>22 So -- but you testified about the</p>

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<p style="text-align: right;">Page 990</p> <p>1 appeal of certain programs to a regional audience, 2 correct? 3 A. I'm not sure I did that, no. 4 Q. No. 5 So you didn't testify about the appeal 6 of certain station-produced programs throughout 7 the State of Arkansas, like you mentioned the 8 Razorbacks, for example -- 9 A. Yes. 10 Q. -- and how that would appeal? 11 When programming decisions are made, it 12 is not made for that larger audience who may be 13 attracted? 14 A. No. 15 Our decisionmaking is tied to what 16 revenue we can expect. The fact that the program 17 might appear outside our DMA may be of interest to 18 those viewers and those cable systems that -- 19 that -- to attract subscribers and to retain 20 subscribers. But our revenue model is based on 21 the revenue that we can obtain, and the only way 22 that we can obtain revenues is through the DMA</p>	<p style="text-align: right;">Page 992</p> <p>1 going to be shown in those markets, correct? 2 THE WITNESS: That's correct. 3 JUDGE ROBERTS: And are you saying that 4 with respect to your ability to charge that car 5 dealership for viewers that are located in 6 Mountain Home and located in Paragould, that you 7 just don't have any ability to -- to charge them 8 for the benefit they're receiving for those 9 markets? 10 THE WITNESS: That's correct. We sell 11 numbers. 12 In your scenario, if a local car dealer 13 came to us with -- with -- with a product to sell, 14 wherever it is, whether it's a national advertiser 15 or a local advertiser, we would be able to sell, 16 or our agency would be able to sell, based on the 17 numbers, the -- the cost per thousand based on the 18 numbers that we get from Nielsen. 19 And he would compare -- or that dealer 20 would compare our rates to the Gannet station's 21 rates in Little Rock and determine who's got the 22 bigger number for the lowest cost and what kind of</p>
<p style="text-align: right;">Page 991</p> <p>1 numbers that we get. We don't get DMA numbers -- 2 don't get numbers for people outside the DMA. 3 Q. But are you aware that people outside 4 the DMA are watching the programs? 5 A. Yes. 6 Q. And you just don't have a quantifiable 7 number for that viewership that you look at? 8 A. Correct. 9 JUDGE ROBERTS: Let me ask you a 10 question about that, Mr. Fritz, and let's look at 11 SP Exhibit 20 of your testimony with KATV. 12 Let's say that you have an advertiser 13 that is a large car dealership and has dealerships 14 throughout the State of Arkansas; a dealership in 15 Mountain Home, another one in Paragould, as well 16 as several of them in the Little Rock area. 17 If that dealership comes to you and 18 seeks to buy time on KATV advertising slots and 19 they do have dealerships in Mountain Home -- a 20 dealership in Mountain Home and at least one in 21 Paragould, they're certainly going to reap some 22 benefit from the fact that the KATV signal is</p>	<p style="text-align: right;">Page 993</p> <p>1 cost per thousand he can get. 2 If he can get the lowest cost and reap 3 a benefit for people outside the DMA, so much the 4 better for him, but that's not how we sell the 5 station. 6 JUDGE ROBERTS: Okay. Thank you. 7 BY MS. HOLMES-PLOVNICK: 8 Q. Can you please turn to Page 2 of your 9 testimony? 10 In the second paragraph on that page, 11 the first sentence that starts with, In -- In the 12 increasingly, could you read that into the record? 13 A. In the increasingly competitive, 14 multiplatform program distribution industry, 15 maintaining unique, valued programming is a 16 primary, critical, strategic goal. 17 Q. Now, when you say a "critical, 18 strategic goal," for whom is it a goal? 19 A. For the station. 20 Q. For the station. 21 So would that kind of unique 22 programming include first run syndicated shows?</p>

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<p style="text-align: right;">Page 994</p> <p>1 A. Yes.</p> <p>2 Q. Like Oprah that we talked about?</p> <p>3 A. Oprah, Wheel, Jeopardy!, all the</p> <p>4 King World product, right.</p> <p>5 Q. All of that, yes.</p> <p>6 Would you say that Allbritton, the</p> <p>7 larger company that you work for, tries to</p> <p>8 establish an identity for its stations through the</p> <p>9 kind of programming that they select?</p> <p>10 A. We try, as a matter of our strategic</p> <p>11 goal, to have valued programming, either locally</p> <p>12 produced programming or highly valued strategic --</p> <p>13 or syndicated programming, yes.</p> <p>14 Q. Now, let me direct your attention to --</p> <p>15 one second -- to Exhibits SP 21 and SP 23.</p> <p>16 Now, SP 21 is a list of the</p> <p>17 station-produced shows on KATV, correct?</p> <p>18 A. Correct.</p> <p>19 Q. But those are not all of the shows that</p> <p>20 were distantly retransmitted by KATV during 2005,</p> <p>21 correct?</p> <p>22 A. Correct.</p>	<p style="text-align: right;">Page 996</p> <p>1 questions.</p> <p>2 JUDGE WISNIEWSKI: While you've got</p> <p>3 Exhibit 23 in front of you, Mr. Fritz, under WJLA,</p> <p>4 on the programs Choose to Save, is the acronym PSA</p> <p>5 public service advertiser?</p> <p>6 THE WITNESS: Public service</p> <p>7 announcement.</p> <p>8 JUDGE WISNIEWSKI: Announcement.</p> <p>9 Thank you.</p> <p>10 That was, in fact, programming that was</p> <p>11 sponsored by Employee Benefits Research Institute</p> <p>12 as well as others?</p> <p>13 THE WITNESS: Exactly, very good.</p> <p>14 CHIEF JUDGE SLEDGE: Other cross?</p> <p>15 (Pause.)</p> <p>16 CHIEF JUDGE SLEDGE: No other cross?</p> <p>17 MR. LUTZKER: No.</p> <p>18 CHIEF JUDGE SLEDGE: Any redirect?</p> <p>19 MR. STEWART: Just a bit, Your Honor.</p> <p>20 CHIEF JUDGE SLEDGE: Okay.</p> <p>21</p> <p>22</p>
<p style="text-align: right;">Page 995</p> <p>1 Q. In fact, there were other shows, like</p> <p>2 you mentioned, these first run syndicated shows</p> <p>3 like Jeopardy! and Oprah Winfrey Show.</p> <p>4 You said you didn't know specifically</p> <p>5 about specific titles, but you know that there</p> <p>6 were shows like that that were aired by KATV?</p> <p>7 A. Correct.</p> <p>8 Q. All right. And then SP 23, that's a</p> <p>9 list of station-produced shows that were</p> <p>10 produced -- or aired in 2005 on KTUL and then</p> <p>11 KCFT/WJSU [sic], WJLA and WHTM?</p> <p>12 A. WCFT, correct.</p> <p>13 Q. I'm sorry.</p> <p>14 Now, in those -- those list of programs</p> <p>15 that are there, those are also not the only</p> <p>16 programs that were nonnetwork programs that were</p> <p>17 transmitted by those stations, correct?</p> <p>18 A. Correct.</p> <p>19 Q. And you said you did know that WJLA</p> <p>20 showed The Oprah Winfrey Show during 2005?</p> <p>21 A. Yes.</p> <p>22 MS. HOLMES-PLOVNICK: I have no further</p>	<p style="text-align: right;">Page 997</p> <p>1 REDIRECT EXAMINATION</p> <p>2 BY MR. STEWART:</p> <p>3 Q. Mr. Fritz, could you turn to the map,</p> <p>4 Exhibit -- the Little Rock map, the exhibit that</p> <p>5 we've been looking at, Exhibit 20?</p> <p>6 And look up in the right-hand corner</p> <p>7 there, that says Jonesboro DMA Number 179.</p> <p>8 Do you see that?</p> <p>9 A. Yes.</p> <p>10 Q. Now, first, do you know how counties</p> <p>11 are assigned to particular DMAs?</p> <p>12 A. It's based on over-the-air viewing.</p> <p>13 And Nielsen does an annual survey, and the</p> <p>14 preponderance of viewing in any county,</p> <p>15 over-the-air viewing, is then attributed to the</p> <p>16 DMAs.</p> <p>17 So DMAs fluctuate on an annual basis.</p> <p>18 And in this case, there are some 22 counties in</p> <p>19 the State of Arkansas that are not in -- other</p> <p>20 than the counties in -- in -- in the Little Rock</p> <p>21 DMA, there's 22 other counties that are shared</p> <p>22 with these other -- other DMAs.</p>

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<p>1 Q. Just looking at the Jonesboro DMA for</p> <p>2 the moment, does that mean that in all those</p> <p>3 counties that are described by that block there,</p> <p>4 that shaded block, people watch Jonesboro stations</p> <p>5 more than they watch stations from other DMAs,</p> <p>6 including Little Rock?</p> <p>7 A. Correct.</p> <p>8 Q. Okay. Now, if an advertiser wanted to</p> <p>9 reach cable subscribers in Paragould or Jonesboro,</p> <p>10 would there be a different way than buying time on</p> <p>11 KATV?</p> <p>12 A. They would go right to the stations in</p> <p>13 Jonesboro and advertise on those stations.</p> <p>14 Q. And do you have a sense of why they</p> <p>15 would do that?</p> <p>16 A. The preponderance of viewing is in</p> <p>17 Jonesboro, and they would -- they would watch the</p> <p>18 local news from Jonesboro or the programming from</p> <p>19 Jonesboro, and the affiliate, the network</p> <p>20 affiliate, that's assigned to the Jonesboro DMA</p> <p>21 would get those and -- and those viewers, and they</p> <p>22 would not be able to watch the KATV programming.</p>	<p>1 Bench?</p> <p>2 JUDGE ROBERTS: No.</p> <p>3 JUDGE WISNIEWSKI: Just one.</p> <p>4 Mr. Fritz, on the last paragraph of</p> <p>5 your testimony --</p> <p>6 THE WITNESS: Yes.</p> <p>7 JUDGE WISNIEWSKI: -- we know how the</p> <p>8 cable operators survey gets to their 16 percent</p> <p>9 number. How do you get to your conclusion?</p> <p>10 What's the basis for your conclusion that it's</p> <p>11 16 percent or more in relative value?</p> <p>12 THE WITNESS: I don't know.</p> <p>13 JUDGE WISNIEWSKI: Thank you.</p> <p>14 CHIEF JUDGE SLEDGE: Does each DMA have</p> <p>15 at least one broadcasting station?</p> <p>16 THE WITNESS: Yes.</p> <p>17 CHIEF JUDGE SLEDGE: It may or may not</p> <p>18 have a cable system?</p> <p>19 THE WITNESS: I believe they all have</p> <p>20 cable systems. The extent to which the cable</p> <p>21 system goes throughout the DMA varies by the DMA.</p> <p>22 For a very large geographic DMA, the</p>
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<p>1 Q. Would there be Jonesboro viewing</p> <p>2 numbers available for sale by the Jonesboro</p> <p>3 stations?</p> <p>4 A. Yes.</p> <p>5 Q. To advertisers; is that right?</p> <p>6 A. Yes.</p> <p>7 Q. Okay. Now, just one further question.</p> <p>8 You talked, in response to questions</p> <p>9 from Ms. Plovnick and with the -- with the Judges</p> <p>10 about -- about KATV's inability to sell audience</p> <p>11 that may occur outside the -- the Little Rock DMA.</p> <p>12 Do you recall that?</p> <p>13 A. Yes.</p> <p>14 Q. Now, is that true just for the</p> <p>15 Allbritton stations of which you're aware, or is</p> <p>16 it more generally true?</p> <p>17 A. It's true throughout the country.</p> <p>18 Q. With respect to stations in other DMAs?</p> <p>19 A. Yes.</p> <p>20 MR. STEWART: Thank you. I have no</p> <p>21 further questions.</p> <p>22 CHIEF JUDGE SLEDGE: Questions from the</p>	<p>1 cost of laying cable to all parts of the DMA would</p> <p>2 be extraordinarily expensive. And so they might</p> <p>3 have a portion of the -- the -- the DMA cabled but</p> <p>4 not the entire DMA. Obviously, on the East Coast,</p> <p>5 more wired than in the western part of the</p> <p>6 United States.</p> <p>7 CHIEF JUDGE SLEDGE: Thank you.</p> <p>8 Thank you, sir.</p> <p>9 All right. Ms. Bayard.</p> <p>10 MS. BAYARD: Your Honor, at this time,</p> <p>11 Mr. Lopez will present a short opening statement</p> <p>12 for the Music Claimants.</p> <p>13 CHIEF JUDGE SLEDGE: All right.</p> <p>14 OPENING STATEMENT ON BEHALF OF</p> <p>15 MUSIC CLAIMANTS, BMI, ASCAP and SESAC</p> <p>16 CHIEF JUDGE SLEDGE: Mr. Lopez.</p> <p>17 MR. LOPEZ: Good morning.</p> <p>18 Chief Judge Sledge, Judge Roberts,</p> <p>19 Judge Wisniewski, I'm Jeff Lopez of Drinker Biddle</p> <p>20 & Reath. I'm counsel for Broadcast Music, Inc.,</p> <p>21 BMI, which, along with SESAC and ASCAP, are the</p> <p>22 three U.S. performing rights organizations.</p>

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Certificate of Service

I hereby certify that on Friday, September 15, 2017 I provided a true and correct copy of the Written Rebuttal Statement to the following:

MPAA-represented Program Suppliers, represented by Gregory O Olaniran served via Electronic Service at goo@msk.com

National Public Radio, Inc. (NPR), represented by Gregory A Lewis served via Electronic Service at glewis@npr.org

Devotional Claimants, represented by Arnold P Lutzker served via Electronic Service at arnie@lutzker.com

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Broadcast Music, Inc. (BMI), represented by Jennifer T. Criss served via Electronic Service at jennifer.criss@dbi.com

SESAC, Inc., represented by John C. Beiter served via Electronic Service at jbeiter@lsglegal.com

American Society of Composers, Authors and Publishers (ASCAP), represented by Sam Mosenkis served via Electronic Service at smosenkis@ascap.com

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Signed: /s/ John Stewart